OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

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OPINION 384

Addition to the Official List of Generic Names in Zoology of the names of fifty-two genera of the Order Carnivora (Class Mammalia) including twenty-nine from which have been reported parasites common to Man

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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OPINION 384

ADDITION TO THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" OF THE NAMES OF FIFTY-TWO GENERA OF THE ORDER CARNIVORA (CLASS MAMMALIA) INCLUDING TWENTY-NINE FROM WHICH HAVE BEEN REPORTED PARASITES COMMON TO MAN

RULING:—(1) The under-mentioned names of genera of the Order Carnivora (Class Mammalia) are hereby placed on the *Official List of Generic Names in Zoology* with the Name Nos. severally specified below:—

- (i) Ailurus Cuvier (G.F.), 1825 (gender: masculine) (type species, by monotypy: Ailurus fulgens Cuvier (G.F.), 1825) (Name No. 926);
- (ii) Alopex Kaup, 1829 (gender: feminine) (type species, by monotypy: Canis lagopus Linnaeus, 1758) (Name No. 927);
- (iii) Amblonyx Rafinesque, 1832 (gender: masculine) (type species, by monotypy: Amblonyx concolor Rafinesque, 1832) (Name No. 928);
- (iv) Arctictis Temminck, [1824] (gender: feminine) (type species, by monotypy: Viverra binturong Raffles, 1821) (Name No. 929);
- (v) Arctogalidia Merriam, 1897 (gender: feminine) (type species, by monotypy through Rule (f) in Article 30: Paradoxurus trivirgatus Gray (J.E.), 1832) (Name No. 930);
- (vi) Atilax Cuvier (G.F.), 1826 (gender: masculine) (type species, by original designation: Herpestes paludinosus Cuvier (G.L.C.F.D.), 1829) (Name No. 931);
- (vii) Bassariscus Coues, 1887 (gender: masculine) (type species, by monotypy through Rule (f) in Article 30: Bassaris astuta Lichtenstein, [1830]) (Name No. 932);

- (viii) Bdeogale Peters, [1850] (gender: feminine) (type species, by selection by Thomas (M.R.O.) (1882): Bdeogale crassicauda Peters, 1852) (Name No. 933);
 - (ix) Civettictis Pocock, 1915 (gender: feminine) (type species, by monotypy: Viverra civetta Schreber, [1777]) (Name No. 934);
 - (x) Conepatus Gray (J.E.), 1837 (gender: masculine) (type species, by monotypy: Conepatus humboldtii Gray (J.E.), 1837) (Name No. 935);
 - (xi) Crossarchus Cuvier (G.F.), 1825 (gender: masculine) (type species, by original designation: Crossarchus obscurus Cuvier (G.F.), 1825) (Name No. 936);
- (xii) Cryptoprocta Bennett, 1833 (gender: feminine) (type species, by original designation: Cryptoprocta ferox Bennett, 1833) (Name No. 937);
- (xiii) Cuon Hodgson, 1838 (gender: masculine) (type species, by monotypy: Cuon primaevus Hodgson, 1838) (Name No. 938);
- (xiv) Cynogale Gray (J.E.), [1837] (gender: feminine) (type species, by monotypy: Cynogale bennettii Gray (J.E.), [1837]) (Name No. 939);
- (xv) Enhydra Fleming, 1822 (gender: feminine) (type species, by monotypy: Mustela lutris Linnaeus, 1758) (Name No. 940);
- (xvi) Eupleres Doyère, 1835 (gender: feminine) (type species, by monotypy: Eupleres goudotii Doyère, 1835) (Name No. 941);
- (xvii) Fennecus Desmarest, 1804 (gender: masculine) (type species, by original designation: Fennecus arabicus Desmarest, 1804) (Name No. 942);
- (xviii) Helarctos Horsfield, 1825 (gender: masculine) (type species, by original designation: Helarctos euryspilus Horsfield, 1825) (Name No. 943);

- (xix) Helictis Gray (J.E.), 1831 (gender: feminine) (type species, by monotypy: Helictis moschata Gray (J.E.), 1831) (Name No. 944);
- (xx) Helogale Gray (J.E.), [1862] (gender: feminine) (type species, by selection by Thomas (M.R.O.) (1882): Herpestes parvulus Sundevall, 1846) (Name No. 945);
- (xxi) Herpestes (emend. of Herpertes) Illiger, 1811 (gender: masculine) (type species, by absolute tautonymy through operation of Rule (f) in Article 30 on the replaced name Ichneumon Lacépède, 1799: Viverra ichneumon Linnaeus, 1758) (Name No. 946);
- (xxii) Ichneumia Geoffroy Saint-Hilaire (I.), 1837 (gender: feminine) (type species, by selection by Geoffroy Saint-Hilaire (I.) (1839): Herpestes albicaudus Cuvier (G.L.C.F.D.), 1829) (Name No. 947);
- (xxiii) Lycaon Brookes, 1827 (gender: masculine) (type species, by monotypy: Lycaon tricolor Brookes, 1827) (Name No. 948);
- (xxiv) Mellivora Storr, 1780 (gender: feminine) (type species, by selection by Sclater (W.L.) (1900): Viverra ratel Sparrman, 1777) (Name No. 949);
- (xxv) Melursus Meyer, 1793 (gender: masculine) (type species, by monotypy: Melursus lybius Meyer, 1793) (Name No. 950);
- (xxvi) Mungos Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795 (gender: masculine) (type species, by selection by Muirhead ([1819]) when emending the name Mungos to Mungo:

 Viverra mungo Gmelin, 1788) (Name No. 951);
- (xxvii) Mydaus Cuvier (G.F.), 1821 (gender: masculine) (type species, by monotypy: Mydaus meliceps Cuvier (G.F.), 1821) (Name No. 952);

- (xxviii) Nandinia Gray (J.E.), 1843 (gender: feminine) (type species, by monotypy: Viverra binotata Gray (J.E.), 1830) (Name No. 953);
 - (xxix) Otocyon Müller (J.), 1836 (gender: masculine) (type species, by monotypy: Otocyon caffer Müller (J.), 1836) (Name No. 954);
 - (xxx) Paradoxurus Cuvier (G.F.), 1821 (gender: masculine) (type species, by indication under Rule (b) in Article 30 (inclusion of a species bearing the name typus or typicus): Paradoxurus typus Cuvier (G.F.), 1821) (Name No. 955);
 - (xxxi) *Poecilogale* Thomas (M.R.O.), 1883 (gender: feminine) (type species, by monotypy: *Zorilla albinucha* Gray (J.E.), 1864) (Name No. 956);
 - (xxxii) Poiana Gray (J.E.), [1865] (gender: feminine) (type species, by monotypy: Genetta richardsonii Thomson (T.R.H.), 1842) (Name No. 957);
- (xxxiii) Proteles Geoffroy Saint-Hilaire (I.), 1824 (gender: masculine) (type species, by original designation: Proteles lalandii Geoffroy Saint-Hilaire, 1824) (Name No. 958);
- (xxxiv) Pteronura Gray (J.E.), 1837 (gender: feminine) (type species, by monotypy: Pteronura sambachii Gray (J.E.), 1837) (Name No. 959);
- (xxxv) Rhynchogale Thomas (M.R.O.), 1894 (gender: feminine) (type species, by monotypy through Rule (f) in Article 30: Rhinogale melleri Gray (J.E.), [1865]) (Name No. 960);
- (xxxvi) Spilogale Gray (J.E.), 1865 (gender: feminine) (type species, by monotypy: Mephitis interrupta Rafinesque, 1820) (Name No. 961);
- (xxxvii) Suricata Desmarest, 1804 (gender: feminine) (type species, by monotypy: Suricata capensis Desmarest, 1804) (Name No. 962);

- (xxxviii) Taxidea Waterhouse (G.R.), 1839 (gender: feminine) (type species, by monotypy: Ursus labradorius Gmelin, 1788) (Name No. 963);
 - (xxxix) Thalarctos Gray (J.E.), 1825 (gender: masculine) (type species, by monotypy: Thalarctos polaris Gray (J.E.), 1825) (Name No. 964);
 - (xl) Urocyon Baird, 1857 (gender: masculine) (type species, by selection by Elliot (1901): Canis virginianus Schreber, [1776]) (Name No. 965);
 - (xli) Viverra Linnaeus, 1758 (gender: feminine) (type species, by selection by Sclater (W.L.) (1900): Viverra zibetha Linnaeus, 1758) (Name No. 966);
 - (xlii) Viverricula Hodgson, 1838 (gender: feminine) (type species, by selection by Sclater (W.L.) (1891): Viverra indica Desmarest, 1804) (Name No. 967);
 - (xliii) Vormela Blasius, 1884 (gender: feminine) (type species, by original designation: Mustela sarmatica Pallas, 1771) (Name No. 968);
 - (xliv) Xenogale Allen, 1919 (gender: feminine) (type species, by original designation: Xenogale microdon Allen, 1919) (Name No. 969);
 - (xlv) Speothos Lund, 1839 (gender: masculine) (type species, by monotypy: Speothes pacivorus Lund, 1839) (Name No. 970);
 - (xlvi) Acinonyx Brookes, 1828 (gender: masculine) (type species, by monotypy: Acinonyx venator Brookes, 1828) (Name No. 971).
- (2) The under-mentioned names of genera of the Order Carnivora are hereby placed on the Official List of Generic Names in Zoology with the endorsements and with the Name Nos. severally specified below:—
 - (i) Galerella Gray (J.E.), [1865] (gender: feminine) (type species, by monotypy: Herpestes

- ochraceus Gray (J.E.), 1849) (for use by those specialists who consider on taxonomic grounds that *Galerella* Gray is distinct from *Herpestes* Illiger, 1811) (Name No. 972);
- (ii) Icticyon Lund, 1842 (gender: masculine) (type species, by monotypy, through Rule (f) in Article 30: Icticyon venaticus Lund, 1842 (for use by those specialists who consider on taxonomic grounds that Icticyon Lund is distinct from the fossil genus Speothos 1839) (Name No. 973);
- (iii) Leucomitra Howell, 1901 (gender: feminine) (type species, by monotypy: Chincha macroura Lichtenstein, 1832) (for use by those specialists who consider on taxonomic grounds that Leucomitra Howell, 1901, is distinct from Mephitis Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795) (Name No. 974);
- (iv) Lutreola Wagner, 1841 (gender: feminine) (type species, by absolute tautonymy: Viverra lutreola Linnaeus, 1761) (for use by those specialists who consider on taxonomic grounds that Lutreola Wagner, 1841, is distinct from Mustela Linnaeus, 1758, as currently interpreted) (Name No. 975);
- (v) Oryctogale Merriam, 1902 (gender: feminine) (type species, by original designation: Mephitis leuconota Lichtenstein, [1832—1834]) (for use by those specialists who consider on taxonomic grounds that Oryctogale Merriam, 1902, is distinct from Conepatus Gray (J.E.), 1837) (Name No. 976);
- (vi) Paracynictis Pocock, 1916 (gender: feminine) (type species, by original designation: Cynictis selousi de Winton, 1896) (for use by those specialists who consider on taxonomic grounds that Paracynictis Pocock, 1916, is distinct from Cynictis Ogilby, 1833) (Name No. 977);

- (3) The application for the addition to the Official List of Generic Names in Zoology of the under-mentioned generic names is hereby rejected, the names concerned being currently treated by specialists as being junior subjective synonyms of names placed on that List by the Ruling given in (1) above, in the first case, of the name Acinonyx Brookes, 1828, and, in the second case, of Amblonyx Rafinesque, 1832:—
 - (i) Cynailurus Wagler, 1830;
 - (ii) Micraonyx Allen, 1919.
- (4) No action is needed on the application for the admission to the Official List of Generic Names in Zoology of the under-mentioned generic names, each of which has already been placed on that List by the Rulings given in the Opinions severally specified below:—
 - (i) Gulo Pallas, 1780 (type species: Mustela gulo Linnaeus, 1758) (Opinion 91);
 - (ii) Nasua Storr, [1780] (type species: Viverra nasua Linnaeus, 1766) (Opinion 91);
 - (iii) Procyon Storr, [1780] (type species: Ursus lotor Linnaeus, 1758) (Opinion 91);
 - (iv) Putorius Cuvier (G.L.C.F.D.), 1817 (type species: Mustela putorius Linnaeus, 1758) (Opinion 91);
 - (v) Ursus Linnaeus, 1758 (type species: Ursus arctos Linnaeus, 1758) (Opinion 75).
- (5) The under-mentioned generic names are hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Nos. severally specified below:—
 - (i) Arctogale Gray (J.E.), [1865] (a junior homonym of Arctogale Kaup, 1828) (Name No. 389);
 - (ii) Bassaris Lichtenstein, [1830] (a junior homonym of Bassaris Hübner, [1819]) (Name No. 390);

- (iii) Cyon Agassiz, 1846 (an Invalid Emendation of Cuon Hodgson, 1838) (Name No. 391);
- (iv) Cynogale Lund, 1842 (a junior homonyn of Cynogale Gray (J.E.), [1837]) (Name No. 392);
- (v) Herpertes Illiger, 1811 (an Invalid Original Spelling for Herpestes) (Name No. 393);
- (vi) *Ichneumon* Lacépède, 1799 (a junior homonym of *Ichneumon* Linnaeus, 1758) (Name No. 394);
- (vii) Lasiopus Gervais, 1835 (a junior homonym of Lasiopus Schoenherr, 1823) (Name No. 395);
- (viii) Lasiopus Geoffroy Saint-Hilaire (I.), 1839 (a junior homonym of Lasiopus Schoenherr, 1823, and a junior objective synonym of Ichneumia Geoffroy Saint-Hilaire (I.), 1837) (Name No. 396);
 - (ix) Mungo Muirhead, 1819 (an Invalid Emendation of Mungos Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795) (Name No. 397);
 - (x) Rhinogale Gray (J.E.), [1865] (a junior homonym of Rhinogale Gloger, 1841) (Name No. 398);
 - (xi) Taxidia Hodgson, 1847 (an Invalid Emendation of Taxidea Waterhouse, 1839) (Name No. 399);
- (xii) *Thalarctus* Agassiz, 1846 (an Invalid Emendation of *Thalarctos* Gray (J.E.), 1825) (Name No. 400).
- (6) The under-mentioned names, each of which is the specific name of the type species of a genus, the name of which has been placed on the *Official List of Generic Names in Zoology* either by Ruling (1) or by Ruling (2) given in the present *Opinion*, are hereby placed on the

Official List of Specific Names in Zoology with the Name Nos. severally specified below:—

- (i) albicaudus Cuvier (G.L.C.F.D.), 1829, as published in the combination Herpestes albicaudus (specific name of type species of Ichneumia Geoffroy Saint-Hilaire (I.), 1837) (Name No. 620);
- (ii) albinucha Gray (J.E.), 1864, as published in the combination Zorilla albinucha (specific name of type species of Poecilogale Thomas (M.R.O.), 1883) (Name No. 621);
- (iii) astuta Lichtenstein, [1830], as published in the combination Bassaris astuta (specific name of type species of Bassariscus Coues, 1887) (Name No. 622);
- (iv) bennettii Gray (J.E.), [1837], as published in the combination Cynogale bennettii (specific name of type species of Cynogale Gray (J.E.), [1837]) (Name No. 623);
- (v) binotata Gray (J.E.), 1830, as published in the combination Viverra binotata (specific name of type species of Nandinia Gray (J.E.), 1843) (Name No. 624);
- (vi) binturong Raffles, 1821, as published in the combination Viverra binturong (specific name of type species of Arctictis Temminck, [1824]) (Name No. 625);
- (vii) civetta Schreber, [1777], as published in the combination Viverra civetta (specific name of type species of Civettictis Pocock, 1915) (Name No. 626);
- (viii) concolor Rafinesque, 1832, as published in the combination Amblonyx concolor (specific name of type species of Amblonyx Rafinesque, 1832) (Name No. 627);
 - (ix) crassicauda Peters, 1852, as published in the combination Bdeogale crassicauda (specific

- name of type species of *Bdeogale* Peters, [1850]) (Name No. 628);
- (x) ferox Bennett, 1833, as published in the combination Cryptoprocta ferox (specific name of type species of Cryptoprocta Bennett, 1833) (Name No. 629);
- (xi) fulgens Cuvier (G.F.), 1825, as published in the combination Ailurus fulgens (specific name of type species of Ailurus Cuvier (G.F.), 1825) (Name No. 630);
- (xii) goudotii Doyère, 1835, as published in the combination Eupleres goudotii (specific name of type species of Eupleres Doyère, 1835) (Name No. 631);
- (xiii) humboldtii Gray (J.E.), 1837, as published in the combination Conepatus humboldtii (specific name of type species of Conepatus Gray (J.E.), 1837) (Name No. 632);
- (xiv) ichneumon Linnaeus, 1758, as published in the combination Viverra ichneumon (specific name of type species of Herpestes (emend. of Herpertes) Illiger, 1811) (Name No. 633);
- (xv) indica Desmarest, 1804, as published in the combination Viverra indica (specific name of type species of Viverricula Hodgson, 1838) (Name No. 634);
- (xvi) interrupta Rafinesque, 1820, as published in the combination Mephitis interrupta (specific name of type species of Spilogale Gray (J.E.), 1865) (Name No. 635);
- (xvii) lagopus Linnaeus, 1758, as published in the combination Canis lagopus (specific name of type species of Alopex Kaup, 1829) (Name No. 636);
- (xviii) leuconota Lichtenstein, [1832—1834], as published in the combination Mephitis leuconota

- (specific name of type species of *Oryctogale* Merriam, 1902) (Name No. 637);
- (xix) lutreola Linnaeus, 1761, as published in the combination Viverra lutreola Linnaeus, 1761 (specific name of type species of Lutreola Wagner, 1841) (Name No. 638);
- (xx) *lutris* Linnaeus, 1758, as published in the combination *Mustela lutris* (specific name of type species of *Enhydra* Fleming, 1822) (Name No. 639);
- (xxi) macroura Lichtenstein, 1832, as published in the combination Chincha macroura (specific name of type species of Leucomitra Howell, 1901) (Name No. 640);
- (xxii) meliceps Cuvier (G.F.), 1821, as published in the combination Mydaus meliceps (specific name of type species of Mydaus Cuvier (G.F.), 1821) (Name No. 641);
- (xxiii) melleri Gray (J.E.), [1865], as published in the combination Rhinogale melleri (specific name of type species of Rhynchogale Thomas (M.R.O.), 1894) (Name No. 642);
- (xxiv) microdon Allen, 1919, as published in the combination Xenogale microdon (specific name of type species of Xenogale Allen, 1919) (Name No. 643);
- (xxv) moschata Gray (J.E.), 1831, as published in the combination Helictis moschata (specific name of type species of Helictis Gray (J.E.), 1831) (Name No. 644);
- (xxvi) mungo Gmelin, 1788, as published in the combination Viverra mungo (specific name of type species of Mungos Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795) (Name No. 645);

- (xxvii) obscurus Cuvier (G.F.), 1825, as published in the combination Crossarchus obscurus (specific name of type species of Crossarchus Cuvier (G.F.), 1825) (Name No. 646);
- (xxviii) ochraceus Gray (J.E.), 1849, as published in the combination Herpestes ochraceus (specific name of type species of Galerella Gray (J.E.), [1865]) (Name No. 647);
 - (xxix) pacivorus Lund, 1839, as published in the combination Speothos pacivorus (specific name of type species of Speothos Lund, 1839) (Name No. 648);
 - (xxx) paludinosus Cuvier (G.L.C.F.D.), 1829, as published in the combination Herpestes paludinosus (specific name of type species of Atilax Cuvier (G.F.), 1826) (Name No. 649);
 - (xxxi) parvulus Sundevall, 1846, as published in the combination Herpestes parvulus (specific name of type species of Helogale Gray (J.E.), [1862]) (Name No. 650);
 - (xxxii) primaevus Hodgson, 1838, as published in the combination Cuon primaevus (specific name of type species of Cuon Hodgson, 1838) (Name No. 651);
- (xxxiii) richardsonii Thomson (T.R.H.), 1842, as published in the combination Genetta richardsonii (specific name of type species of Poiana Gray (J.E.), [1865]), (Name No. 652);
- (xxxiv) sambachii Gray (J.E.), 1837, as published in the combination Pteronura sambachii (specific name of type species of Pteronura Gray (J.E.), 1837) (Name No. 653);
- (xxxv) selousi de Winton, 1896, as published in the combination Cynictis selousi (specific name of type species of Paracynictis Pocock, 1916) (Name No. 654);

- (xxxvi) trivirgatus Gray (J.E.), 1832, as published in the combination Paradoxurus trivirgatus (specific name of type species of Arctogalidia Merriam, 1897) (Name No. 655);
- (xxxvii) venaticus Lund, 1842, as published in the combination Icticyon venaticus (specific name of type species of Icticyon Lund, 1842) (Name No. 656);
- (xxxviii) zibetha Linnaeus, 1758, as published in the combination Viverra zibetha (specific name of type species of Viverra Linnaeus, 1758) (Name No. 657).
- (7) The under-mentioned specific names, each of which is the name of a nominal species currently identified by specialists with a nominal species having a later available name which is the type species of a genus placed on the Official List of Generic Names in Zoology either by Ruling (1) or by Ruling (2) in the present Opinion, are hereby placed on the Official List of Specific Names in Zoology with the Name Nos. severally specified below:—
 - (i) capensis Schreber, [1776], as published in the combination Viverra capensis (Name No. 658);
 - (ii) cinereoargenteus Schreber, [1776], as published in the combination Canis cinereo-argenteus (Name No. 659);
 - (iii) cristata Sparrman, 1783, as published in the combination Viverra cristata (Name No. 660);
 - (iv) hermaphroditus Pallas, [1777], as published in the combination Viverra hermaphroditus (Name No. 661);
 - (v) malayanus Raffles, 1821, as published in the combination Ursus malayanus (Name No. 662);

- (vi) maritimus Linnaeus, 1758, as published in the combination Ursus maritimus (Name No. 663);
- (vii) megalotis Desmarest, 1822, as published in the combination Canis megalotis (Name No. 664);
- (viii) peregusna Gueldenstaedt, 1770, as published in the combination Mustela peregusna (Name No. 665);
- (ix) picta Temminck, 1820, as published in the combination Hyaena picta (Name No. 666);
- (x) suricata Schreber, [1777], as published in the combination Viverra suricata (Name No. 667);
- (xi) taxus Schreber, [1777], as published in the combination Ursus taxus (Name No. 668);
- (xii) ursinus Shaw, 1791, as published in the combination Bradypus ursinus (Name No. 669);
- (xiii) venatica Griffith, 1821, as published in the combination Felis venatica (Name No. 670);
- (xiv) zerda Zimmermann, 1780, as published in the combination Canis zerda (Name No. 671);
- (8) The under-mentioned specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Nos. severally specified below, each of these names being applicable to a nominal species representing a taxon (a) currently treated by specialists as being a subspecies of the same taxon as that represented by a nominal species which is the type species of a genus, the name of which has been placed on the Official List of Generic Names in Zoology by the Ruling given in the present Opinion, and (b) bearing an older name than the nominal species referred to above:—
 - (i) alpinus Pallas, [1811], as published in the combination Canis alpinus (Name No. 672);

- (ii) cinerea Illiger, [1815], as published in the combination Lutra cinerea (Name No. 673);
- (iii) jubata Schreber, [1776], as published in the combination Felis jubata (Name No. 674);
- (9) The applications for the admission of the undermentioned generic names to the Official List of Generic Names in Zoology are hereby postponed, pending the further investigation of the issues involved in these cases:—
 - (i) *Aonyx* Lesson, 1827;
 - (ii) Crocuta Kaup, 1828;
 - (iii) Cynictis Ogilby, 1833;
 - (iv) Hyaena Brisson, 1762;
 - (v) Lutra Brisson, 1762;
 - (vi) Meles Brisson, 1762;
 - (vii) Genetta Oken, 1816;
 - (viii) Grison Oken, 1816;
 - (ix) Tayra Oken, 1816;
 - (x) *Ictonyx* Kaup, 1835;
 - (xi) Lutrogale Gray (J.E.), 1865;
 - (xii) Marputius Gray (J.E.), 1837;
 - (xiii) Martes Pinel, 1792;
 - (xiv) Mustela Linnaeus, 1758;
 - (xv) Mephitis Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795;
 - (xvi) *Potos* Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795;
 - (xvii) Vulpes Oken, 1816.

I.—THE STATEMENT OF THE CASE

On 5th February 1934 the late Dr. C. W. Stiles (Smithsonian Institution, Washington, D.C., U.S.A.) submitted to the International Commission (under cover of Circular Letter C.L.247) a list of the names of seventy-four genera of the Order Carnivora (Class Mammalia) which he suggested the Commission should consider placing on the Official List of Generic Names in Zoology. In the covering Circular Letter Dr. Stiles explained, as Secretary to the Commission, that, after having prepared the foregoing list, he had sent copies of it for comment "to three outstanding authorities in the nomenclature of mammals, namely Commissioner Cabrera, Dr. G. S. Miller and Dr. T. S. Palmer of Washington". He added that comments had been received from Dr. Cabrera and that these had been incorporated in the list now submitted to the Commission¹. Dr. Stiles explained also that the list had been compiled from a then unpublished paper containing a catalogue of animal parasites reported from Carnivora and that the numbers assigned to each name in the annexed application were the numbers of the entries allotted in the host list of parasites given in the paper referred to above. The paper in question was published in December 1934 under the title "Key Catalogue of Parasites reported for Carnivora (Cats, Dogs, Bears, etc.) with their possible Public Health Importance" (Stiles (C.W.) & Baker (Clara Edith), 1934, Nat. Inst. Hlth. Bull. 163: 911-1223). In his earlier correspondence with the specialists mentioned above (though not in C.L.247) Dr. Stiles had explained that out of a total of about 1,700 species of animal parasites recorded from species of Carnivora, over 200 had been reported from Man. Dr. Stiles added: "Accordingly, it becomes important from a standpoint of Public Health to establish as firmly as possible the generic names of the animals which harbour these parasites". At the conclusion of Circular Letter C.L.247 Dr. Stiles invited each member of the Commission to submit the annexed list "to some specialist in mammals in his own country for study and

¹ The extracts from the communication received from Dr. Cabrera incorporated by Dr. Stiles in his application are here distinguished by being printed in smaller type.

recommendation "and asked that, when these comments had been obtained, they should be forwarded to the Office of the Commission, so that in the light of the information so furnished he (Dr. Stiles) could prepare a definitive proposal for submission to the Commission for decision. The following is the list submitted to the Commission under cover of Circular Letter C.L.247:—

Names of Genera of Carnivora suggested for admission to the "Official List of Generic Names in Zoology"

By C. W. STILES,

- (Smithsonian Institution, U.S. National Museum, Washington, D.C., U.S.A.)
- 415. Cynailurus Wagler, 1830, Natür. Syst. Amphib., 30, mt. jubatus Linn. syn. guttata Schreb.

Cabrera:

- Cynailurus Wagler, 1830, is invalidated by Acinonyx Brookes, Cat. Anat. Zool. Mus., 1828, p. 16, mt. venator Brook., 1828=venaticus Smith, 1827 (the Indian cheetah). (See Hollister, Proc. Biol. Soc. Washington, xxiv, 1911, p. 225 and xxvii, 1914, p. 216).
- 420. Nandinia Gray, 1843, List Spec. Mamm. Brit. Mus., pp. xx, 54, mt. binotata Gray, 1830.
- 427. Paradoxurus Cuv., 1821, Hist. nat. Mamm., Livr. 24, Jan., 5, pl. 1, tod. typus so. (1883) hermaphroditus Pall. in Schreb. 1777.

Cabrera:

- Paradoxurus. Its type species by od., typus Cuv., is not =hermaphroditus Pall., but = Viverra nigra Desmarest, Mamm. 1820, p. 208 (not V. nigra. Pal. y Beauv.), = V. bondar Desmarest, 1820, p. 210. Hence, tod. typus Cuv. =bondar Desm. (See Cabrera, Bolet, R. Soc. Esp., pl. 5, xvii, 1917, p. 487, and Robinson and Kloss, Rec. Ind. Mus., xix, 1920, p. 178).
- 428. Arctictis Temminck, 1824, Prospectus Monogr. Mamm., Paris, Mar., v. 1, p. xxi (nv), mt. binturong Raffles, Sumatra.
- 430b. Cynogale Gray, 1837, Proc. Zool. Soc. London, pt. 4 (46), Feb., 88, mt. tod. bennetti Gray, 1837.
- 433. Genetta Oken, 1816, Lehrb. Naturg., Zool., 3 Th., 2 Abth., pp. xi, 1010, tat. genetta Linn.; tsd. (1900) vulgaris so. genetta; Cuv., 1817, Règne anim., Paris, v. 1, 156, tat. genetta.

- Genetta. If Oken's names not available, Genetta Cuv., 1817, Règne Anim., I, p. 156. tat. genetta Linn.
- 435. Civettictis Pocock, 1915, Proc. Zool. Soc. London, v. 1, March 26, 134, mt. civetta Schreb.

- 437. Viverra Linn., 1758a, 43, tsd. (1900; 1904; 1911) zibetha Linn.
- 438. Viverricula Hodgson, 1838, Ann. Mag. Nat. Hist., v. 1 (2), Apr., 152, ? tsd. (date ?) malaccensis syn. indica.
- 441. Eupleres Doyère, 1835, Bull. Soc. Sci. Nat., France, no. 3, March, 45; no. 5, June, 103, mt. tod. goudotii; Ann. Sci. nat., Paris, 2d ser., v. 4, Nov., 280, mt. tod. goudotii, Madagascar.
- 444. Cryptoprocta Bennett, 1833, Proc. Zool. Soc. London, v. 1 (4), May 46, mt. tod. ferox.
- 432a. Poiana Gray, 1864, Proc. Zool. Soc. London, 507, 520, mt. richardsoni Gerrard so. (tsd. 1904) poensis Waterhouse, from Fernando Po.

Poiana. The name poensis Waterh. has nothing to do with this. Genetta poensis Waterh. is a true Genetta, and not a synonym of Poiana richardsoni as wrongly stated by Palmer. (See Pocock, Proc. Zool. Soc. London, 1907, 2, p. 1039.)

448. Suricata Desm., 1804, Nouv. Dict. Hist. Nat., ed. 1, 15, tab. 24 (nv), tsd. (1882; 1900; 1904) tetradactyla Linn. syn. (1904) capensis Desm. syn. (tsd. 1918) suricatta syn. zenik.

- Suricata. The specific synonym of type is suricatta Schreb., 1776; tetradactyla Schreb., 1777 (not Linnaeus, as wrongly said by Palmer); zenik Scopoli, 1786; capensis Desmarest, 1804. The genus is monotypic, type capensis Desm., =suricatta Schreb. (The dates of names from Sherborn.)
- 448b. Bdeogale Peters, 1850, Mitth. Ges. naturf. Fr. Berlin, Nov. 19 (nv); 1852 Bericht Verhandl. König. Preuss. Akad. Wiss., Berlin, 81—82; Naturwiss. Reise nach Mossambique, Zool., I, Säugeth., 119—125, pls. 27—28; tsd. (1882; 1904; 1919; 1924) crassicauda.
- 450. Cynictis Ogilby, 1833, Proc. Zool. Soc. London, pt. 1 (4), May 24, 48, mt. steedmanni so. (tsd. 1900; 1904; 1919) penicillata Cuv.
- 427a. Arctogalidia Merriam, 1897, Sci., n.s., v. 5 (112), Feb. 19, 302, tod. Paradoxurus trivirgatus Gray, from Moluccas.
- 448c. Paracynictis Pocock, 1916, Ann. Mag. Nat. Hist., ser. 8, v. 17 (98), Feb., 177—179, mt. tod. selousi de Winton, Bulawayo.

451(450). Galerella Gray, 1864, Proc. Zool. Soc. London, 509, 564, mt. ochracea Gerrard so. tsd. (1882; 1904) gracilis Rüppell, E. Africa.

- Galerella. The name gracilis Rüpp. has nothing to do with this; it is not synonym of ochracea, as said by Palmer. According to Thomas (Ann. Mag. Nat. Hist., 10s, II, 1928, p. 408 and Proc. Zool. Soc. Lond., 1929, p. 102) these names are not even congeneric, ochracea being the type of Galerella and gracilis the tod. of Myonax Thomas, 1928.
- 454a(454). Rhynchogale Thomas, 1894, Proc. Zool. Soc. London, pt. 1, June 1, 139, mt. tsd. (1900; 1904; 1919) melleri, Rhinogale Gray, 1864 (not Gloger, 1841, Mustelidae) renamed.
- 455(456). Mungos Geoffr. & Cuv., 1795, Mag. Encycl., v. 2, 184, 187, tat. mungos, tsd. (1919; 1924) mungo Gmel., of Africa.
- 456(455). *Crossarchus* Cuv. *in* Geoffr. & Cuv., 1825, Hist. nat. Mamm. v. 3 (47), Feb., 5, mt. tod. *obscurus* Cuv.
- 458(459). Atilax Cuv. in Geoffr. & Cuv., 1826, Hist. nat. Mamm., v. 3 (54), June, 2, tod. vansire = (tsd. 1882; 1900; 1904) galera Schreb. = (tsd. 1918; 1919; 1924) paludinosus Cuv.
- 460*A*(460*B*). *Helogale* Gray, 1861, Proc. Zool. Soc. London, no. 20, 308, tsd. (1900; 1904; 1919) 1st sp. *parvula* Sundevall, from Natal.
- 462(462a). Ichneumia Geoffr., 1837, Ann. Sci. nat. Paris, ser. 2, Zool., v. 8, Oct., 251; 1837, C. r. Acad. Sci., Paris, v. 5(17), post Oct. 23, 580, tsd. (1839 Lasiopus renamed; 1919) 1st sp. albicauda Cuvier, E. Africa, Senegal.
- 462a(462). Xenogale Allen, 1919, J. Mamm., v. 1(1), Nov., 26—27, mt. tod. microdon.
- 464. Herpestes Illiger, 1811, Prod. Syst. Mamm., 136 (Herpertes), 297 (Herpestes), Ichneumon 1799 = "Mangusta 1804" renamed, ergo tod. also tsd. (1878; 1882; 1900; 1904; 1915; 1924) 1st sp. ichneumon Linn., of Africa.
- 466. Proteles Geoffr., 1824, Bul. Sci. Soc. Philom., Paris, Sept., 139, tod. lalandii Geoffr., 1824, from Cape of Good Hope.

469. Hyaena Brisson, 1762, Regnum Animale, 168—169, 248, tat. hyaena Linn., from Africa, tsd. (1900) striata.

Cabrera:

Hyaena. If Brisson's names are to be rejected, Hyaena Brünnich, Zool. Tundam., 1772, p. 34 (I have not seen this book), or Zimmermann, Geogr. Gesch., II, 1780, p. 256.

469B(469A). Crocotta Kaup. 1829, Ent. Gesch. u. Natürl. Syst. Europ. Thierwelt, v. 1, 74, 78, tat. crocuta.

Cabrera:

Crocotta is an unnecessary emended form of Crocuta Kaup., 1828, Oken's Isis, xxi, 11, p. 1145. tat. and mt. crocuta. (See Allen, Bull, Amer. Mus. N. H. xlvii, 1924, p. 214.)

- 473. Lycaon Brookes in Griffith's Cuvier, 1827, Anim. Kingd., v. 5, 151, mt. Canis tricolor Brookes so. Hyaena picta Temm.
- 476(477). Cuon Hodgson, 1838, Ann. Nat. Hist., London, v. 1(2), Apr., 152, mt. tod. primaevus Hodgson, from Nepal, so. (1888) dukhunensis Sykes, 1831.

Cabrera:

Cuon. I cannot see the reason for changing Cuon to Cyon. Of course both forms are now used with the same frequency, but Cuon is the original form and was, I think, in general use for fifty years. According to Article 19, "The original orthography is to be preserved unless an error of transcription is evident". If by this a wrong transliteration is to be understood, that is not the case here. The Greek "u" is, indeed, generally latinized in "y", but we have the names Uperanodon and Uperodon in Reptilia, both derived from the Greek and latinized, by the Latin people itself, in mus. I vote, therefore, for Cuon.

- 477(476). *Icticyon* Lund, 1843, Oversigt K. danske Vidensk. Selsk. Forhandl., Kjöbenhavn, for 1842, no. 6, 80, mt. *venaticus* Lund, 1842.
- 480. Otocyon ("Lichtenstein") Mueller, 1836, Archiv Anat. Phys., Med., 1 (nv), ? mt. caffer Lichtenstein so. (tsd. 1900; 1918) megalotis Desm., S. Africa; Lichtenstein in Wiegmann, 1838, Arch. Naturg., v. 1, 290, mt. megalotis Desm. syns. caffer Licht., lalandii Geoffr.
- 483. Fennecus Desmarest, 1804, Nouv. Dict. Hist. nat., ed. 1, v. 24, 18 (nv), tsd. (1904) arabicus so. cerdo Gmel. in Linn., Africa.
- 485. Vulpes Oken, 1816, Lehrb. Naturg., 3 Th. Zool. Abth. 2, 1033, 1034, tat. Canis vulpes Linn. syn. Vulpes vulgaris.

Cabrera:

Vulpes. If Oken's names are rejected, Vulpes Bowditch, 1821, Anal. Nat. Classif. Mamm., p. 40. tat. Canis vulpes Linn.

- 486. Alopex Kaup, 1829, Entw.-Gesch. Natürl. Syst. Europ. Thierwelt, v. 1, 189, mt. Canis lagopus Linn.
- 488. Urocyon Baird, 1857, Mamm. N. Amer., July, pt. 1, 121, 138, 143, tsd. (1901; 1904) 1st sp. virginianus Erxl. so. cinereo-argenteus Schreb., from Eastern U.S.A.
- 494. Aonyx Lesson, 1827, Man. de Mammalogie, Paris, 157, mt. delalandi Lesson, 1827, inunguis Cuv., 1823, renamed so. (tsd. 1900) capensis Schinz., 1821.
- 495. Micraonyx Allen, 1919, J. Mamm., v. 1 (1) November, 24, tod. leptonyx Horsf., 1823 so. cinerea Illiger, 1815.

- Micraonyx Allen, 1919 is not valid, it being simply a synonym of Amblonyx Raf., 1832 (see under 498a). The type species of Micraonyx is Lutra cinerea Illig., and the type species of Amblonyx is Lutra concolor Raf., which is a synonym of cinerea. Both generic names being based on the same species (the Indian small-clawed otter) they are synonyms, and the oldest one is to be used. (See Pocock, Proc. Zool. Soc. London, 1921, p. 543.)
- 497A. Pteronura Gray, 1837, Charlesworth's Mag. Nat. Hist., n.s., v.1, 580, mt. sambachii Gray, 1837, so. (1897; 1911) brasiliensis Zimm., 1780, Demerara.
- 498a. Amblonyx Rafinesque, 1832, Atlantic J., v. 1 (2), Summer (post May), 62, mt. Lutra concolor Raf., 1832 (concolar) syn. (tat.) Lutra amblonyx Raf., 1832, from Assam.
- 499. Lutra Brisson, 1762, Regnum Animale, 201, 250, tat. lutra Linn., syn (tsd. 1891; 1900) vulgaris Erxl.

Cabrera:

- Lutra. If Brisson's name not available, Lutra Brünnich, Zool. Tundam., 1780, p. 34. tat. Mustela lutra Linn. (See Miller, Cat. Mamm. W. Eur., 1912, p. 354).
- 500. Lutrogale Gray, 1865, Proc. Zool. Soc. London, no. 8, 127, 1st sp. monticola Hodgson, 1855, from Himalaya.

Cabrera:

Lutrogale. The tsd. is macrodus Gray, 1865, =tarayensis Hodgs., 1839. The genus contained originally two species, monticola and macrodus; but monticola = nair F. Cuv., which is a true Lutra, and macrodus = tarayensis remains as the only species in the genus. (See Pohle, Arch. Naturg., 1919, and Hinton and Fry, Journ. Bomb. N. H. Soc., xxix, 1923, p. 416.)

- 502. Enhydra Fleming, 1822, Philos. Zool., v. 2, 187, "Sea Otter", probably tsd. (1904) Lutra marina Steller, from coasts of North Pacific; tsd. (1924) Mustela lutris Linn.
- 506. Helictis Gray, 1831, Proc. Zool. Soc. London, pt. 1 (8), post June 28, 94, mt. (only definite species) moschata Gray (tsd. 1904).
- Vormela Blasius, 1884, Bericht naturforsch. Gesellsch. Bamberg,
 v. 13, 9—10, 14, mt. tod. sarmatica Pallas so. (tsd. 1912)
 peregusna Gueldenstaedt.
- 511—515. Mustela Linn., 1758a, 45, tat. erminea Linn. (quotes Mustela vulgaris Gesner), etd. (1901) martes Linn., etd. (1901) lutra Linn.
- 514. Lutreola Wagner, 1841, Schreber's Säugthiere, Suppl., v. 2, 239, tat. lutreola Linn.
- 515. Putorius Cuvier, 1817, Règne Anim., v. 1, 147, tat. Mustela putorius Linn.
- 521. Martes Pinel, 1792, Actes Soc. d'Hist. Nat., Paris, v. 1(1), 55, mt. domestica Pinel so. foina, Erxl.—Fishers, Martens.
- 523. Gulo Pallas, 1780, Spicil. Zool., Berolini, Fasc. 14, 25; Storr, 1780, Prodr. Meth. Mamm., 34, tab. A, tsd. (1901) Ursus luscus Linn., tsd. (1924) Gulo sibiricus Pallas so. tat. (1924) Ursus gulo Linn. (tsd. 1901; 1904; 1912).—Wolverine, Vielfrass.
- 525. Tayra Oken, 1816, Lehrb. Naturg., Zool., Th. 3, Abt. 2, pp. xi, 1001, tsd. (1904; 1911; 1924) Mustela barbara Linn. Tayra.

- Tayra. If Oken's name not accepted this genus should become Eira H. Smith, Jard. Nat. Libr., xxxv, 1842, p. 202; originally with three species: barbara, hylia and ferruginea, but from the text it appears that barbara is the true basis of the genus, the two others being somewhat doubtfully referred to it.
- 528. Meles Brisson, 1762, Regnum Anim., 183, 249, tat. meles Linn. True badgers, Blaireau, Dachs.

- Meles. If rejected as of Brisson, we have Meles Storr, Prodr. Meth. Mamm., 1780, p. 34. tat. Ursus meles Linn.
- 533. Mydaus Cuvier in Geoffr. & Cuv., 1821, Hist. Nat. Mamm., v. 2(27), April 2, mt. meliceps. Stinkdachs, Telagon, Teledu.

- 538. Mellivora Storr, 1780, Prodr. Meth. Mamm., 34, tab. A, tsd. (1900; 1904; 1924) ratel Sparrman so. (1924) capensis Schreb. Ratels, Honey-badgers.
- 540. *Ictonyx* Kaup, 1835, Thierreich, v. 1, 352, mt. *capensis* Kaup so. (tsd. 1904) *zorilla* Erxl., tsd. (1900) *striata*. African stripedzorillas, striped zorilles, striped muishond, Bandiltiss, Kralleniltisse, Zorillen.
- 541. Poecilogale Thomas, 1883, Ann. Mag. Nat. Hist., 5th ser., v. 11, 370, mt. albinucha Gray, 1864.
- 544. Taxidea Waterhouse, 1838, Proc. Zool. Soc. London, pt. 6 (71), 154, mt. labradoria Gmel. in Linn., 1788 so. (tsd. 1912; 1924) taxus Schreb., 1777. American badgers.
- 547. Grison Oken, 1816, Lehrb. Naturg., Zool., Th. 3, Abt. 2, pp. xi, 1000, mt. Viverra vittata Schreb. Grisons.

- Grison. If Oken's name rejected, the first available name seems to be Galictis Bell, Zool. Journ., II, 1826, p. 551, mt. vittata Schreb.
- 550. Conepatus Gray, 1837, Charlesworth's Mag. Nat. Hist., v. 1, n.s., 581, mt. humboldtii Gray, conepatl Gmel. (tsd. 1904) renamed—Bare nosed skunks of Mexico and S. America, South American skunks, White-backed skunks.

- Conepatus. The specific name conepatl Gmel. has nothing to do here, being not a synonym of humboldtii, which is the type of the genus; humboldtii is a Patagonian species, whereas conepatl is utterly undeterminable, but surely from Mexico or Central America.
- 550A. Oryctogale Merriam, 1902, Proc. Biol. Soc. Wash., v. 15, Aug. 6, 161—162, tod. Conepatus leuconotus Licht., from Vera Cruz, Mex.
- 550B. Marputius Gray, 1837, Charlesworth's Mag. Nat. Hist., v. 1, n.s., 581, mt. Mephitis chilensis Geoffr.
- 552. Mephitis Geoffr. & Cuv., 1795, Mag. Encycl., v. 2, 187 (for mouffette), tsd. (1901) "Les Moufettes" (cf. mephitis), tsd. (1904; 1912; 1924) mephitis Schreb. True skunks, moufette, Stinkhier.
- 552B. Leucomitra Howell, 1901, North Amer. Fauna, No. 20, Aug. 31, 20, 39, mt. tod. Chincha macroura Licht., from mountains north-west of City of Mexico. Hooded skunks.

- 553. Spilogale Gray, 1865, Proc. Zool. Soc. London, No. 8, 150, mt. interrupta Raf., 1820. Little spotted skunk, little striped skunk.
- 561. Procyon Storr, 1780, Prodr. Meth. Mamm., 35—36, tab. A, tsd. (1891; 1904; 1912; 1915; 1924) Ursus lotor Linn., Raccoons, raton, raton layeur, Waschbär.
- 563. Nasua Storr, 1780, Prodr. Meth. Mamm., 35, tab. A, tat. nasua Linn. Coatis, Coati-Mudis, Cuati.
- 566. Bassariscus Coues, 1887, Sci., v. 9 (225), May 27, 516, tod. (Art. 30f Internat. Comm. Nomen.) Bassaris astuta Licht., (Bassaris Licht., 1831, renamed).
- 568. Potos Geoffr. & Cuv., 1795, Mag. Encycl., v. 2, 187 (for Kinkajou) tsd. (1904; 1924) Viverra caudivolvula Schreb. Kinkajous, Wickelbär.

- Potos. The specific name of genotype caudivolvulus Schreb., 1777 is invalidated by flavus Schreb., 1774, this name being used by all the modern authors. But I wonder if the true name must not be simiasciurus. Schreber, in fact, published in his "Heft 6", 1774, a figure of the animal, based on the "yellow maucaues" of Pennant, with the name Lemur simiasciurus, and in "Heft 9", the same year, gave the corresponding description, without any Latin name, but only the German "Der Maki mit dem Wickelschwanze". Now, in this "Heft 9" he gave also an index to the plates in Vol. I, and the animal was called there Lemur flavus. Afterwards (I do not know the exact date), no doubt to make the plate in accord with the index, he gave another plate with the same number (xlii), to be substituted for the older one, and in it the name is again Lemur flavus. Unfortunately, the new figure, a copy of Petiver's "Gazophylaeium", does not represent a kinkajou at all, but a true lemur, very likely L. mongoz. Complete sets of Schreber's "Säugthiere" are very rare, and in many of them the oldest plate with the name simiasciurus is wanting. It is no doubt by this that the authors use the name flavus. I should like to know other mammalogist's opinion about that.
- 570. Ailurus Cuv. in Geoffr. & Cuv., 1825, Hist. nat. Mamm., June, v. 3 (50), 3, mt. fulgens Geoffr. & Cuv. Panda.
- 573. Helarctos Horsfield, 1825, Zool. J., v. 2(6), July, 221—234, tod. euryspilus Horsfield, from Borneo.
- 574. Melursus Meyer, 1793, Zool Entdeck., Leipzig, 155—160, mt. lybius Meyer so. Bradypus ursinus Shaw renamed. Sloth bears, Baerdachs.

575. Thalarctos Gray, 1825, Ann. Phil., n.s., v. 10, July, 62, mt. polaris Gray so. maritima Phipps. Polar bears, Polargebiet.

Cabrera:

abrera:

Thalarctos. I think the type species maritimus (=polaris Gray) dates from Linnaeus, 1758. It is generally given as of Phipps, 1774, or of Erxleben, 1777, overlooking the fact that the name appeared for the first time in the tenth edition of Syst. Nat., p. 47, at the end of text on Ursus arctos. The name is there accompanied by a definition (albus, major, arcticus) and a bibliographical reference (Martens Spitzb. 73, t.o.f.c.), and with the observation: ," forte distinct species est, nobis non visa". It appears from this that Linnaeus doubted if the Polar bear was a true species or merely a variety of the European brown-bear; but, at all events he designated it with the name Ursus maritimus, the specific name printed in the same type as all the other specific names in the book, and he gave with it a definition and a reference. No more is necessary, in my opinion, to recognize a name as valid.

576. Ursus Linn., 1758a, 47, tat. arctos Linn. syn. ursus Gesner. Ordinary bears, black bears, brown bears, grizzly bears, Bär.

II.—THE SUBSEQUENT HISTORY OF THE CASE

- 2. Response in the period 1934/35 to the appeal for advice addressed to specialists through Circular Letter 247: In June 1934 Dr. Stiles submitted to the Commission a Circular Letter (C.L. 260) in which he reported that in response to the appeal made in Circular Letter C.L.247 he had received reports on his proposal for the admission to the Official List of Generic Names in Zoology of the names of genera in the Order Carnivora from two sources: (1) from Professor E. Bourdelle (Muséum National d'Histoire Naturelle, Paris) through Commissioner Jacques Pellegrin of the same Institution; (2) from Dr. De Beaux (Museo di Storia naturale, Genova) through Commissioner F. Silvestri (R. Laboratio di Entomologia Agraria, R. Instituto Superiore Agrario in Portici, Italy). Copies of the letters and reports so received were annexed by Dr. Stiles to Circular Letter C.L.260.
- 3. Issue of a Call for a Vote in September 1934: In September 1934 Dr. Stiles issued a further Circular Letter (C.L.261) to the members of the Commission in regard to the present case, in which he called for "a formal vote on the names of Carnivora

mentioned in Circular Letters 247 and 260". In the Voting Paper issued with the foregoing Circular Letter the names as regards which a vote on the question of admission to the *Official List of Generic Names in Zoology* was then asked for were indicated through the citation of the numbers severally affixed thereto in the original proposal by Dr. Stiles when submitted with the earlier of the Circular Letters referred to above.

- 4. Report in March 1935 on the response to the Call for a Vote issued with Circular Letter C.L.261: In March 1935 Dr. Stiles reported to the Commission in Circular Letter 285 that up to that date only four Members of the Commission had completed and returned the Voting Paper issued with Circular Letter C.L.261, namely: (1) Professor Karl Apstein (Berlin); (2) Dr. Karl Jordan (Tring, England), by whom had been forwarded a number of comments from mammalogists in the United Kingdom; (3) Dr. James L. Peters (Cambridge, Mass., U.S.A.); (4) Professor F. Silvestri (Portici, Italy). Particulars of the comments forwarded by Dr. Jordan and details of the votes cast by the foregoing Commissioners were included in the above Circular Letter.
- 5. Addition of the present application in March 1935 to the Agenda for the Session then about to be held by the Commission at Lisbon: In March 1935 Dr. Stiles issued to the Members of the Commission a Circular Letter (C.L.309) in which he enumerated the cases then outstanding which he suggested should be dealt with by the Commission when it met at Lisbon in September of that year. The present application was included in the Agenda so submitted.
- 6. Procedural decisions taken by the Commission at Lisbon in September 1935: When the Commission assembled at Lisbon in September 1935, Dr. Stiles was absent on account of ill health and the documents relating to the present case were not available. It was impossible therefore for the Commission to take a substantive decision on the issues involved. It considered, however, that a stage had been reached at which the future procedure to be followed in this matter could be appropriately laid down.

This question was considered at a Meeting of the Commission held on Tuesday, 17th September 1935 (Lisbon Session, 4th Meeting, Conclusion 16). The interim decision then taken is set out in the following extract from the Official Record of the Proceedings of the Commission at the above Session (1943, *Bull. zool. Nomencl.* 1:41):—

THE COMMISSION:-

- (a) took note:—
 - (i) that various comments on the list had been received from the specialists consulted;
 - (ii) that these comments were in the hands of the Secretary by whom the list would be corrected where necessary;
- (b) agreed to leave it to the Secretary to determine which names should be deleted from the list in the light of the comments received and authorised him to proceed with the issue of an *Opinion* placing on the *Official List of Generic Names* such of those generic names as remained in the list that had been circulated, after it had been checked in the manner indicated in (a)(ii) above.
- 7. Registration of the present application: The papers relating to the present application were transferred in 1938 to the custody of Mr. Francis Hemming consequent upon his election as Secretary to the Commission in succession to Dr. Stiles. Upon the receipt of these papers the application submitted by Dr. Stiles was allotted the Registered Number Z.N.(S.) 97.
- 8. Investigations undertaken by Mr. Hemming in the period 1944-1947: The outbreak of war in Europe in September 1939 led to the evacuation of the records of the Commission to the country as an insurance against the risk of their being destroyed in air raids and it was not until the summer of 1942 that it was possible to re-open the Commission's Secretariat in London. The first task following the resumption of work in 1942 was to establish the Bulletin of Zoological Nomenclature as a means for bringing to the attention of zoologists applications submitted to the Commission for decision and to prepare all new applications then outstanding for publication in that serial. As soon as this

task had been completed, the documents relating to the present case were examined by Mr. Hemming, to whom, as the successor to Dr. Stiles, then fell the duty of carrying out the investigation decided upon by the Commission at its Lisbon Session (paragraph 6 above.) As a result of a preliminary survey, Mr. Hemming formed the conclusion that, contrary to what had been thought at Lisbon, it would not be sufficient merely to collate the comments which had been received in the present case as a preliminary to the preparation of an Opinion placing on the Official List of Generic Names in Zoology those of the generic names included in Dr. Stiles' application (paragraph 1 above) to which no exception had been taken. Mr. Hemming took this view partly because his preliminary survey brought to light difficult problems in connection with certain names in Dr. Stiles' list to which till then no objection had been received from any source and partly because the requirements in the matter of the citation of bibliographical references for names when placed on the Official List decided upon by the Commission at its Lisbon Session would clearly involve the further investigation of each of the names included in Dr. Stiles' application. This investigation, which involved both extensive bibliographical searches and also consultation with leading mammalogists resident in countries between which and the United Kingdom postal communications at that time were still open, covered the period 1944-1947. At the close of that period Mr. Hemming had completed the draft of the Report which he had been invited to prepare. that document he had included recommendations for the admission to the Official List of forty-three of the seventy-four names included in Dr. Stiles' application, had recommended the rejection of the proposals relating to two of those names, and had taken note that five of the names concerned had already been placed on the Official List. In the case of eighteen of the names included in Dr. Stiles' application, special issues were found to be involved, including in some cases the use of the Commission's Plenary Powers if serious disturbance in current nomenclatorial practice was to be avoided. In each of these cases the draft Report contained proposals based upon the advice received from the mammalogists consulted. As regards the remaining six names each had been found to be an available name but in each case some specialists regarded the name in question as a junior subjective synonym of some other name, while other specialists

regarded the name in question as representing a taxonomically valid genus or subgenus. As regards this latter group of names Mr. Hemming at that time formulated no recommendations, being of the opinion that it was desirable first to obtain the directions of the Commission as to the action to be taken in such cases.

9. Effect on the present application of certain procedural decisions taken by the Thirteenth International Congress of Zoology, Paris, 1948: The present application was not considered by the International Commission at its Session held in Paris in 1948. It was, however, materially affected by certain of the procedural decisions then taken by the Thirteenth International Congress The decisions in question were the following: of Zoology. (1) the General Directive issued to the Commission by the Congress that a note specifying the gender of every generic name placed on the Official List of Generic Names in Zoology should be inserted in the entry on that List relating to that name; (2) the establishment of the Official Index of Rejected and Invalid Generic Names in Zoology and the issue by the Congress of a Directive that names found by the Commission to be objectively invalid should be inscribed on that Index; (3) the establishment of the Official List of Specific Names in Zoology (then styled the Official List of Specific Trivial Names in Zoology) and the issue to the Commission of a Directive instructing it, inter alia, to place on that Official List the specific name (then styled the "trivial name") of every species which was the type species of a genus, the name of which was placed on the Official List of Generic Names in Zoology where the specific name in question was an available name and was accepted by specialists as being the oldest such name for the species concerned, and, in other cases to place on that List the specific name accepted by specialists as the oldest available name for the taxon concerned; (4) the issue to the Commission by the Congress of a Directive that, where specialists desired the stabilisation of the generic nomenclature of a given group but were not agreed as to the number of taxonomically valid genera involved, the Commission should place on the Official List of Generic Names in Zoology not only the oldest available generic name concerned but also other names which were accepted by some but not all specialists as the names of taxonomically valid genera or subgenera, subject to the endorsement of the entry so made on the Official List in relation to any junior generic name so placed thereon that it was placed on that List for use by specialists who were of the opinion that the name concerned represented a taxonomically valid genus or subgenus distinct from that represented by the nominal genus bearing the older of the names then placed on the List. The last of the foregoing decisions provided, as will be seen, clear guidance as to the action which should be taken in regard to the six names included in the application dealt with in the present Opinion which, as explained in paragraph 8 above, had been found by Mr. Hemming to be names regarded by some, but not by all, specialists as being junior subjective synonyms of older names.

10. Submission by Mr. Hemming in 1955 of a First Report, with recommendations dealing with the greater part of the application submitted in the present case: The decisions taken by the International Congress of Zoology in Paris in 1948 in regard to the matters specified in paragraph 9 above made it necessary for Mr. Hemming, in the case of each of the names dealt with in Dr. Stiles' application to re-examine and supplement the proposals which he had included in the draft of the Report on that application which he had completed in 1947. Mr. Hemming was unable to begin this survey until after the publication in 1950 in volumes 4 and 5 of the Bulletin of Zoological Nomenclature of the Official Record of the Proceedings of the Commission and the Congress in Paris in 1948, for it was on the basis of the decisions taken at the Paris meetings that the review then to be undertaken would need to be based. Thereafter, Mr. Hemming directed his attention to the present case as and when opportunity offered but it was not until after his retirement from the United Kingdom Civil Service and his starting of whole-time duty as Honorary Secretary to the Commission that he was able to devote sufficient time to this case to bring it to an issue. In his Report Mr. Hemming added the additional particulars and submitted the additional recommendations called for by the decisions taken by the Paris Congress. In one respect, however, this Report differed from the draft completed in 1947, for in it Mr. Hemming dealt only with those portions of Dr. Stiles' application which he recommended should

either be granted or rejected, and reserved for later Reports in the same series the consideration of the eighteen names which, as explained in paragraph 8 above, involved special issues and in some cases also the use of the Plenary Powers if serious disturbance or nomenclatorial practice was to be avoided. Mr. Hemming signed his Report on 11th February 1955. This Report, together with a covering note giving a brief historical account of the present case was submitted to the Commission on 23rd February 1955. In view of the large number of names involved, Mr. Hemming's Report, though prepared in a very condensed form, was necessarily a somewhat lengthy document, and it has accordingly been decided to attach it to the present *Opinion* as an Annexe in place of including it in the main body of the *Opinion*.

III.—THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

11. Issue of Voting Paper V.P.(O.M.)(55)7: On 23rd February 1955 a Voting Paper (V.P.(O.M.)(55)7) was issued in which each Member of the Commission was asked (1) to state whether, "in conformity (a) with the decision already taken in principle by the International Commission regarding the placing on the Official List of Generic Names in Zoology of the names of genera belonging to the Order Carnivora (Class Mammalia) from species of which parasites common to Man have been reported submitted to the Commission by the late Dr. C. W. Stiles, in every case where the generic name concerned is accepted by mammalogists as the oldest available name for a valid taxonomic genus, and (b) with the General Directives subsequently issued to the Commission by the International Congress of Zoology for the placing of names (i) on the Official List of Specific Names in Zoology, and (ii) upon Official Indexes of Rejected and Invalid Names", he agreed "that the names specified in Appendices 1 to 5 of the Report on the foregoing application prepared, at the request of the Commission, by the Secretary [i.e. in Appendices 1 to 5 in the Report reproduced in the Annexe to the present Opinion] and submitted under cover of a note bearing the

Registered Number Z.N.(S.) 97, simultaneously with the present Voting Paper be placed on the *Official Lists* and *Official Indexes* there specified ", and (2), if he did not so agree as regards any given item, to indicate that item.

- 12. The Prescribed Voting Period for Voting Paper V.P.(O.M.) (55)7: As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 23rd March 1955.
- 13. Particulars of the Voting on Voting Paper V.P.(O.M.)(55)7: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.)(55)7 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty-two (22) Commissioners (arranged in the order in which Votes were received):

Riley; Lemche; Stoll; Hering; Vokes; Tortonese; Boschma; Hankó; Mayr; Esaki; Key; Bradley (J.C.); do Amaral; Sylvester-Bradley; Cabrera; Hemming; Dymond; Kühnelt; Miller; Bonnet; Bodenheimer; Jaczewski;

(b) Negative Votes:

None;

(c) On Leave of Absence, three (3):

Holthuis; Mertens; Prantl;

(d) Voting Papers not returned:

None.

- 14. Declaration of Result of Vote on Voting Paper V.P.(O.M.) (55)7: On 24th March 1955, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.)(55)7, signed a Certificate that the Votes cast were as set out in paragraph 13 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 15. Second Report by the Secretary on Dr. C. W. Stiles' Application Z.N.(S.) 97, with special reference to the generic name "Mellivora" Storr, 1780: On 24th June 1955 Mr. Hemming submitted the following Second Report on Dr. C. W. Stiles' Application Z.N.(S) 97, in which he dealt mainly with the generic name Mellivora Storr, 1780, but in addition brought to the attention of the International Commission certain minor matters arising on his First Report which he had found required further consideration:—

Proposed addition to the "Official List of Generic Names in Zoology" of "Mellivora" Storr, 1780, the name of a genus in the Order Carnivora (Class Mammalia) from which have been reported parasites which have also been reported from Man: Second Report on Application Z.N.(S.) 97 submitted by the late Dr. C. W. Stiles

By FRANCIS HEMMING, C.M.G., C.B.E.,

Secretary to the International Commission on Zoological Nomenclature

The proposal now submitted to the Commission is in the nature of a supplement to those submitted in my First Report (dated 11th February 1955) on the application laid before the Commission by the late Dr. C. W. Stiles for the addition to the Official List of Generic Names in Zoology of a long list of names of genera of the Order Carnivora (Class Mammalia), from species of the majority of which parasites have been reported which have also been recorded from Man. The foregoing Report was submitted with Voting Paper V.P.(O.M.)(55)7 and received the approval of the whole of the membership of the Commission. In that Report I recommended that fifty-one generic names should be placed on the Official List forthwith, but that decisions should be temporarily deferred on eighteen of the names included in Dr. Stiles' list. One of the names which were then recommended for

postponement was the name *Mellivora* Storr, 1780 (*Prodr. Meth. Mamm.*: 34). This is the name with which the present Report is concerned.

- 2. When I examined Storr's *Prodromus*, I found that the name *Mellivora* nowhere occurred in it in the nominative singular as is required under Article 8 before a generic name can acquire the status of availability. So far therefore as the text of the *Prodromus* was concerned, the name *Mellivora* Storr was not an available name. I noted, however, that in reference works mention was made of a table "A" on which this generic name was said to occur. It seemed possible, indeed likely, that the name *Mellivora* appeared in the nominative singular on this table, but unfortunately it was lacking in the copy of the *Prodromus* which I consulted. It was for this reason that in the Report referred to above I recommended that a decision on the proposed admission of the generic name *Mellivora* Storr to the *Official List* should be postponed until such a time as the question of the availability of this name was cleared up.
- 3. I have now to report that I have since had an opportunity to consult a complete copy of Storr's *Prodromus* in the Zoological Library at the British Museum (Natural History) and that I find that on table "A" the name *Mellivora* duly appears in the nominative singular. This name is therefore an available name as from the *Prodromus* of 1780. For the reasons explained in Dr. Stiles' application and bearing in mind that *Mellivora* Storr is one of the genera of Carnivora from which have been reported parasites reported also from Man (see Stiles (C.W.) & Baker (Clara Edith), 1934. *Nat. Inst. Hlth. Bull.* 163: 1168—1169), this name should now be placed on the *Official List of Generic Names in Zoology*.
- 4. The type species of *Mellivora* Storr, 1780, is the nominal species *Viverra ratel* Sparrman, 1777 (*K. svensk. Vet.-Akad. Handl.*, Stockholm 38:147), having been so selected by Sclater (W.L.), 1900 (*Mamm. S. Africa* 1:109). The species so named is currently identified with the taxon represented by the nominal species *Viverra capensis* Schreber, [1776], (*Die Säugthiere* 3:pl. 125; *id.*, [1777], *ibid.* 3:450). Accordingly, under the Regulations governing the admission of names to the *Official Lists* it is the name *capensis* Schreber and not the name *ratel* Sparrman which should now be placed on the *Official List of Specific Names in Zoology*.
- 5. On recently re-examining the Report submitted with Voting Paper V.P.(O.M.)(55)7, I find that, as then submitted, it contained two minor errors of transcription and two inadvertent omissions. These are: (1) the feminine gender instead of the masculine gender was attributed to Amblonyx Rafinesque, 1832; (2) the name maritimus, the specific name for the Polar Bear, was attributed to Phipps, 1774,

instead of to Linnaeus, 1758 (:47), by whom (as pointed out by Commissioner Cabrera²) this name was first published for the foregoing species; (3) the name Lasiopus Gervais, 1835 (a junior homonym of Lasiopus Schoenherr, 1823) was omitted from the list of names proposed to be placed on the Official Index of Rejected and Invalid Generic Names in Zoology; (4) the name primaevus Hodgson, 1838, as published in the combination Cuon primaevus (the name of the nominal species which is the type species of Cuon Hodgson, 1838) was treated as a junior subjective synonym of alpinus Pallas, [1811], as published in the combination Canis alpinus, whereas it is currently treated as the oldest available name for a subspecies for Pallas' alpinus. This name should now be placed on the Official List of Specific Names in Zoology. It is recommended that in every case the corrections indicated above should be made when the Ruling is prepared for the Opinion embodying the decision taken by the vote on the Voting Paper referred to above.

- 6. The recommendations now submitted in this matter is that the International Commission should:—
 - (1) place the under-mentioned generic name on the Official List of Generic Names in Zoology: Mellivora Storr, 1780 (gender: feminine) (type species, by selection by Sclater (W.L.) (1900): Viverra ratel Sparrman, 1777);
 - (2) place the under-mentioned specific name on the *Official List* of Specific Names in Zoology: capensis Schreber, [1776], as published in the combination Viverra capensis;
 - (3) incorporate in the Ruling to be given in the *Opinion* embodying the decision taken on Voting Paper V.P.(O.M.)(55)7 the minor corrections specified in paragraph 5 above.
- 7. The foregoing proposals are submitted as a matter of urgency, for, although the draft of the *Opinion* giving effect to the decision taken by the Commission on Voting Paper V.P.(O.M.)(55)7 has already been prepared, there are a number of earlier *Opinions* awaiting publication and it will therefore, I hope, be possible to include in the same *Opinion* decisions on the questions raised in the present Report.
- 16. Registration of Mr. Hemming's Second Report on Dr. C. W. Stiles' Application Z.N.(S). 97: At the time of the submission of Mr. Hemming's First Report on Dr. C. W. Stiles'

See the note by Dr. Cabrera incorporated by Dr. Stiles in his original application (: 97).

Application Z.N.(S.) 97, a separate Registered Number was allotted to each of the names which in that Report he recommended should be postponed for further consideration and for which Registered Numbers had not so far been allotted. The Registered Number then allotted to the case of the generic name *Mellivora* Storr, 1780, was Z.N.(S). 974. Upon the receipt of Mr. Hemming's Second Report (the text of which had been reproduced in paragraph 15 of the present *Opinion*), it was decided that, as the greater part of that Report was concerned with the generic name *Mellivora* Storr, it should be placed in the Registered File which had been opened for the consideration of that name. Hence it was that, when Mr. Hemming's Second Report was submitted to the Commission for vote it was submitted under the Registered Number Z.N.(S.) 974.

17. Issue of Voting Paper V.P.(O.M.)(55)21: On 24th June 1955 a Voting Paper, V.P.(O.M.)(55)21 was issued in which each member of the Commission was invited to state (1) whether he agreed that "in conformity with the decision already taken in principle by the International Commission regarding the placing on the Official List of Generic Names in Zoology of the names of genera of the Order Carnivora (Class Mammalia) from species of which parasites have been reported which have been reported also from Man submitted to the Commission by the late Dr. C. W. Stiles and in conformity also with the decision in relation to the names of fifty-one genera of the above Order recently taken by the Commission in its Vote on Voting Paper (O.M.)(55)7, approval be now given to the proposals regarding the generic name Mellivora Storr, 1780, and other miscellaneous matters specified in paragraph 6 of the note bearing the number Z.N.(S.) 974 submitted by the Secretary simultaneously with the present Voting Paper", and (2), if he did not so agree as regards any given item, to specify that item.

18. The Prescribed Voting Period for Voting Paper V.P.(O.M.) (55)21: As the foregoing Voting Paper was issued under the One Month Rule, the Prescribed Voting Period closed on 24th July 1955.

- 19. Particulars of the Voting on Voting Paper V.P.(O.M.)(55)21: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.)(55)21 was as follows:—
 - (a) Affirmative Votes had been given by the following twenty-four (24) Commissioners (arranged in the order in which Votes were received):

Holthuis; Stoll; Vokes; Sylvester-Bradley; Lemche; Boschma; Bodenheimer; Cabrera; Esaki; Dymond; Prantl; Tortonese; Key; Bradley (J.C.); Miller; Jaczewski; Mertens; Mayr; Riley; do Amaral; Bonnet; Hankó; Hemming; Hering;

(b) Negative Votes:

None;

(c) On Leave of Absence, one (1):

Kühnelt;

(d) Voting Papers not returned:

None.

20. Declaration of Result of Vote on Voting Paper V.P.(O.M.) (55)21: On 24th July 1955, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.)(55)21, signed a Certificate that the Votes cast were as set out in paragraph 19 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

- 21. Preparation of the Ruling given in the present "Opinion": On 25th July 1955 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposals approved by the International Commission in its Vote on Voting Paper V.P.(O.M.)(55)7, as supplemented by its Vote on V.P.(O.M.)(55)21.
- 22. Original References: The original references for the names placed on Official Lists and Official Indexes by the Ruling given in the present Opinion are as set out in Appendices 1 to 5 to the First Report by the Secretary on Dr. C. W. Stiles' Application Z.N.(S.) 97 which forms the Annexe to the present Opinion, as supplemented as respects two names by paragraphs 1 and 4 of the Second Report by the Secretary on the above Application the text of which has been reproduced in paragraph 15 of the present Opinion.
- 23. The references to the places where the type species of certain of the genera, the names of which have been placed on the Official List of Generic Names in Zoology by the Ruling given in the present Opinion were selected under Rule (g) in Article 30 are given also in the portions of Mr. Hemming's First and Second Reports cited in the preceding paragraph.
- 24. Family-Group Name problems: As explained by the Secretary in paragraph 11 of his First Report on the present case, the family-group name problems raised by the addition to the Official List of Generic Names in Zoology are at present under investigation and will form the subject of a further Report to the Commission. This problem has been allotted the Registered Number Z.N.(S.) 959.
- 25. Registration of the names reserved for further consideration by the Ruling given in the present "Opinion": The following Registered Numbers have been allotted to the names reserved

for further consideration by the Ruling given in the present Opinion:—

Generic [*] Name	Registered Number
(i) Aonyx Lesson, 1827	Z.N.(S.) 966
(ii) Crocuta Kaup, 1828	Z.N.(S.) 967
(iii) Cynictis Ogilby, 1833	Z.N.(S.) 968
(iv) Hyaena Brisson, 1762	Z.N.(S.) 177
(v) Lutra Brisson, 1762	Z.N.(S.) 177
(vi) Meles Brisson, 1762	Z.N.(S.) 177
(vii) Genetta Oken, 1816	Z.N.(S.) 969
(viii) Grison Oken, 1816	Z.N.(S.) 969
(ix) Tayra Oken, 1816	Z.N.(S.) 969
(x) Ictonyx Kaup, 1835	Z.N.(S.) 758
(xi) Lutrogale Gray, 1865	Z.N.(S.) 970
(xii) Marputius Gray, 1837	Z.N.(S.) 971
(xiii) Martes Pinel, 1792	Z.N.(S.) 973
(xiv) Mustela Linnaeus, 1758	Z.N.(S.) 972
(xv) <i>Mephitis</i> Geoffroy Saint- Hilaire & Cuvier, 1795	Z.N.(S.) 975
(xvi) <i>Potos</i> Geoffroy Saint- Hilaire & Cuvier, 1795	Z.N.(S.) 976
(xvii) Vulpes Oken, 1816	Z.N.(S.) 977

26. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

27. The present *Opinion* shall be known as *Opinion* Three Hundred and Eighty-Four (384) of the International Commission on Zoological Nomenclature.

DONE in London, this Twenty-Fifth day of July, Nineteen Hundred and Fifty-Five.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

ANNEXE TO OPINION 384



FIRST REPORT ON THE LATE DR. C. W. STILES' PROPOSALS FOR THE ADDITION TO THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" OF THE NAMES OF GENERA OF THE ORDER CARNIVORA (CLASS MAMMALIA) FROM SPECIES OF WHICH HAVE BEEN REPORTED PARASITES COMMON TO MAN (Z.N.(S.) 97)

By FRANCIS HEMMING, C.M.G., C.B.E.,

Secretary to the International Commission on Zoological Nomenclature

At its Session held at Lisbon in September 1935 (Lisbon Session, 4th Meeting, Conclusion 16) (1943, Bull. zool. Nomencl. 1:41), the International Commission on Zoological Nomenclature had under preliminary consideration a proposal submitted by Dr. C. W. Stiles (at that time Secretary to the Commission) for the addition to the Official List of Generic Names in Zoology of the names of seventy-four genera of the Order Carnivora (Class Mammalia) from species of which there had been reported parasites common to Man. In submitting this proposal which was based upon an exhaustive survey of the literature relating to the parasites of Carnivora, Dr. Stiles had expressed the view that it was of great importance from the standpoint of public

health that the names of these genera should be stabilised as soon as possible. After taking note of certain preliminary investigations already carried out, the Commission "agreed to leave it to the Secretary to determine which names should be deleted from the list [i.e. the list submitted by Dr. Stiles] in the light of the comments received and authorised him to proceed with the issue of an *Opinion* placing on the *Official List of Generic Names* such of those generic names as remained in the list that had been circulated after it had been checked" in the light of the comments received.

- 2. At the time of the Lisbon Session of the Commission Dr. Stiles was already in poor health and had already asked to be relieved of the Office of Secretary to the Commission. For this reason he unfortunately found it impossible to take any further action in this case. The papers in regard to this case were transferred to my custody in 1938 in consequence of my having been elected his successor in the Office of Secretary. When in 1944 I was able to turn my attention to this case, I formed the view that it would not be sufficient merely to analyse the comments already received in regard to this application and that it would be necessary to make a detailed study, in conjunction with mammalogists, of each of the names concerned before definite proposals could properly be laid before the Commission. These studies proved laborious and extended over a long period, for it was found necessary not only to verify with specialists the taxonomic position of the nominal genera concerned but also to carry out extensive bibliographical studies for the purpose of determining the place of first publication of each of the generic names concerned and of the names of the type species of those genera. In many cases also extensive search was needed in order to ascertain where the type species for the genera in question had first been validly designated, indicated or selected as such under the Rules prescribed in Article 30 of the Règles.
- 3. By the time of the Session of the Commission held in Paris in 1948 I had completed the first draft of my Report on the proposals submitted by Dr. Stiles and had drawn up recommendations for the admission to the Official List of the majority

of the names concerned and, as regards the remainder had indicated why, in my judgment, the proposals concerned should either be rejected or should be postponed for separate treatment. I did not then proceed with this matter, for the decision by the Paris Congress that, whenever a generic name is placed on the Official List, (a) the entry so made shall specify the gender of the name concerned, and (b) the name of the type species of the genus in question shall, if the oldest available name, be placed on the then newly established Official List of Specific Names in Zoology made it necessary to review each of the names dealt with in the Report in order to secure compliance with the foregoing decisions by the Congress. This further investigation has been completed for some time, but pressure of other classes of work in the Office of the Commission has so far prevented the submission of this case to the Commission.

- 4. It was originally my intention to discharge in respect of each name the duty laid upon me in this matter by submitting to the Commission a comprehensive Report examining in detail each of the seventy-four generic names recommended by Dr. Stiles for admission to the Official List, this Report to include proposals for action by the Commission in respect of each name, including in certain cases action under the Plenary Powers, either for the purpose of preserving well known names for continued use in their accustomed sense or for the purpose of clearing up matters in doubt which required settlement before a decision could be taken on the proposals submitted by Dr. Stiles. I have, however, since thought it more convenient to adopt a procedure under which the names submitted by Dr. Stiles will be dealt with in a series of Reports, each dealing either with a homogeneous group of names or with an individual name or names in respect of which special difficulties have been found to exist.
- 5. The present Report contains recommendations only as regards those generic names (a) which are available names, (b) which are accepted by specialists as the oldest such names for taxonomically valid genera and (c) whose type species, as determined under Article 30 of the *Règles*, are the species currently

accepted as the type species of the genera concerned. In other words, the names regarding which recommendations are now submitted comprise only those names which the Commission at its Lisbon Session decided in principle should be placed on the Official List and in respect of which it then authorised the Secretary to prepare, and to render on its behalf, an Opinion placing the names concerned on the Official List. In this latter respect I have not followed the procedure laid down by the Commission at Lisbon, in that I have considered it preferable first to submit the names in question to the Commission for express approval.

- 6. Of the seventy-four generic names submitted by Dr. Stiles forty-nine are now recommended for admission to the Official List. Forty-three of these names—all in universal use—are set out in Section "A" of Appendix 1. The remaining six names, which are set out in Section "B" of Appendix 1, are nomenclatorially available names for genera accepted on taxonomic grounds by some but not all specialists. It is proposed that, in accordance with the General Directive given to the Commission by the International Congress of Zoology for adoption in cases such as the present (1950, Bull. zool. Nomencl. 4: 237, 268), these names should be placed on the Official List, the entries so made to be endorsed to show that these names are so added for use by those specialists who on taxonomic grounds accept the genera so named as being zoologically valid. Sections "C" and "D" of Appendix 1 each contain one generic name which it is recommended should be placed on the Official List. Neither of these names was included in Dr. Stiles' list; the first is, however, regarded by some specialists, and the second by all specialists, as a senior subjective synonym of a name included in Dr. Stiles' proposals. In all, therefore, fifty-one generic names are recommended for admission to the Official List.
- 7. Appendix 2, Section "A" contains two generic names included in Dr. Stiles' proposal, the request for the admission of which to the *Official List* should, it is recommended, be rejected. Section "B" of the same Appendix contains five names which

were submitted by Dr. Stiles but which it has been found are already on the *Official List*. No action therefore is required in regard to these latter names.

- **8.** Appendix 3 contains a list of eleven invalid generic names which have come to notice during the investigation of Dr. Stiles' application. These names are either junior homonyms, or junior objective synonyms, of older names or are Invalid Emendations of other names. It is recommended that these names should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology.
- 9. Appendix 4 contains recommendations for placing fifty-seven names on the Official List of Specific Names in Zoology. Section "A" contains a list of thirty-seven specific names, each of which is (it is agreed) the oldest available name for the species concerned and is the name of the type species of a genus, the name of which it is now recommended (in Appendix 1) should be placed on the Official List of Generic Names in Zoology. Section "B" is concerned with fourteen specific names, each of which is (it is agreed) a senior subjective synonym of the name of the type species of a genus, now recommended for admission to the Official List of Generic Names. Section "C" contains two names, each of which is accepted as the name of a taxon of which the "type species" of a genus, the name of which is now recommended for addition to the Official List of Generic Names, is currently regarded by specialists on taxonomic grounds as being a constituent subspecies.
- 10. In Appendix 5 I give a list of the remaining eighteen generic names submitted by Dr. Stiles. For the reasons briefly indicated in that Appendix, I consider decisions on each of these names should be deferred for further examination of the issues involved. These names will form the subject of later Reports in the present series.

11. Summary of action recommended on the application submitted by the late Dr. C. W. Stiles: In the light of the information given in the preceding paragraphs, it is now possible to present the following table showing the action recommended as regards the seventy-four generic names which Dr. Stiles recommended should be placed on the Official List of Generic Names in Zoology:—

Table 1

Action recommended in the case of the seventy-four generic names in the Class Mammalia (Order Carnivora) proposed by Dr. C. W. Stiles for admission to the "Official List of Generic Names in Zoology"

Class of Name	Number of Names
(1) Names which are (a) nomenclatorially available and (b) accepted by all specialists as the oldest available names for the genera concerned and which it is therefore now recommended should be placed on the Official List (Appendix 1, Section "A") (2) Names which (a) are nomenclatorially available and (b) are regarded by some, but not by all, specialists to be the oldest available names for taxonomically valid genera and which it is therefore now recommended should be placed on the	43
Official List with an endorsement stating that they are so placed for use by specialists who accept the genera so named as being taxonomically valid (Appendix 1, Section "B")	6

Class of Name	Number of Names
 (3) Total No. of names now proposed to be placed on the Official List (4) Names, the application for the admission of which to the Official List it is proposed 	49
should be rejected (Appendix 2, Section "A") (5) Names found to be already on the Official	2
List (Appendix 2, Section "B") (6) Names, the addition of which to the Official List should, it is recommended by deferred pending a further	5
mended, be deferred, pending a further examination of the issues involved (Appendix 5)	18
(7) Total No. of names included in Dr. C. W. Stiles' application as names for admission	
to the Official List	74

12. Importance from the standpoint of Public Health of stabilising the generic names of Carnivora recommended by Dr. C. W. Stiles for addition to the "Official List of Generic Names in Zoology": In submitting his proposal for the addition to the Official List of Generic Names in Zoology of the names of seventyfour genera of the Order Carnivora, Dr. Stiles stressed the importance from the standpoint of Public Health of stabilising the names of these genera, having regard to the fact that some two hundred and fifty (about 18 per cent.) of the parasites reported from species of these genera had been reported also from Man. At the time of the submission of this application Dr. Stiles explained that the particulars given in it had been extracted from a paper then in the press containing a comprehensive review of the literature relating to the occurrence of parasites in Carnivora. This paper of which the joint authors were Stiles (C.W.) & Baker (Clara Edith) was published in December 1934 (i.e. at the close of the year in which Dr. Stiles submitted his application to the Commission) under the title "Key Catalogue of Parasites reported for Carnivora (Cats, Dogs, Bears, etc.) with their possible Public Health Importance"

(Nat. Inst. Hlth. Bull. 163: 911—1223). I have carefully examined this paper which fully bears out the opinion expressed by Dr. Stiles that it is important from the Public Health point of view that the names of these genera of Carnivora should be stabilised as quickly as possible. For out of the seventy-four genera included in Dr. Stiles' application parasites reported from Man have been reported from no less than forty-eight. The names concerned are the following:—

Table 2
Names of genera of the Order Carnivora from species of which there have been reported parasites also reported from Man

Names of Genera	Number of Names
(1) Names of genera recommended for immediate admission to the "Official List": Acinonyx (Cynailurus); Ailurus; Alopex; Arctictis; Atilax; Civettictis; Conepatus; Crossarchus; Cuon; Fennecus; Galerella; Helarctos; Helogale; Herpestes; Ichneumia; Icticyon; Lycaon; Melursus; Mungos; Otocyon; Paradoxurus; Pro-	
teles; Suricata; Taxidea; Thalarctos; Urocyon; Viverra; Viverricula	28
Gulo; Nasua; Procyon; Putorius; Ursus;	5
Hyaena; Ictonyx; Lutra; Marputius; Martes; Meles; Mellivora; Mephitis; Mustela; Tayra; Vulpes	15

- 13. Family-Group Name Problems: The family-group name problems involved in the present case are still under investigation. When the present survey has been completed, a separate Report on this subject will be submitted to the Commission for consideration.
- 14. In submitting the present Report, I have to acknowledge with gratitude the great assistance which has been rendered in the course of its preparation by the authorities in charge of the great scientific libraries in London. At the same time I wish to express my gratitude to the following specialists, each of whom has given most valuable help in the elucidation of problems arising in connection with one or other of the names dealt with in the present Report, or has been good enough to check the proposals now submitted :--Professor Dr. H. Boschma, Dr. L. D. Brongersma and Dr. G. C. A. Junge (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands); Dr. David H. Johnson; (United States National Museum, Washington, D.C., U.S.A.); Dr. Angel Cabrera (Cuidad Eva Peron, Argentina); Dr. Philip Hershkovitz (Chicago Natural History Museum, Chicago, Illinois, U.S.A.); Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England); Dr. Remington Kellogg (United States National Museum, Washington, D.C., U.S.A.); Dr. T. C. S. Morrison-Scott (British Museum (Natural History), London); the late Dr. Wilfred H. Osgood (Chicago Natural History Museum, Chicago, Illinois, U.S.A.); Dr. Henry W. Setzer (United States National Museum, Washington, D.C., U.S.A.); the late Dr. G. H. H. Tate (The American Museum of Natural History, New York).
- 15. The recommendations now submitted are that the International Commission should:—
 - (1) place on the Official List of Generic Names in Zoology the fifty-one names specified in Appendix 1;
 - (2) reject the application for the admission to the Official List of Generic Names in Zoology of the two names specified in Section "A" of Appendix 2;

³ Since the completion of this Report, the former name La Plata has been restored to this city.

- (3) take note that the five names specified in Section "B" of Appendix 2 have already been placed on the Official List of Generic Names in Zoology;
- (4) place on the Official Index of Rejected and Invalid Generic Names in Zoology the eleven names specified in Appendix 3;
- (5) place on the Official List of Specific Names in Zoology the fifty-three names specified in Appendix 4;
- (6) take note that Reports will be submitted as soon as possible in regard to the eighteen generic names specified in Appendix 5, which have been postponed for further investigation.

FRANCIS HEMMING

Secretary to the International Commission on Zoological Nomenclature

11th February 1955

- Names of genera in the Order Carnivora (Class Mammalia) recommended for addition to the "Official List of Generic Names in Zoology"
- Section A:—Forty-three generic names, each of which is an available name and is accepted by mammalogists as the oldest such name for a valid taxonomic genus
- Ailurus Cuvier (G.F.), 1825, in Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), Hist. nat. Mammif. 3(50): "Panda" 3 et Tab. 203 (gender: masculine) (type species, by monotypy: Ailurus fulgens Cuvier (G.F.), 1825, in Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), Hist. nat. Mammif. 3(50): "Panda" 3 et Tab. 203)
- Alopex Kaup, 1829, Skizz. Entwickel.-Gesch. u. nat. Syst. europ. Thierwelt: 85 (gender: feminine) (type species, by monotypy: Canis lagopus Linnaeus, 1758, Syst. Nat. (ed. 10) 1:40)
- **Amblonyx** Rafinesque, 1832, *Atlantic J.* **1**(2): 62 (gender: masculine)⁴ (type species, by monotypy: **Amblonyx concolor** Rafinesque, 1832, *Atlantic J.* **1**(2): 62)
- Arctictis Temminck, 1824, *Monogr. Mammalog.* 1: xxi (gender: feminine) (type species, by monotypy: Viverra binturong Raffles, 1821, *Trans. linn. Soc. Lond.* 13(1): 253)

⁴ By an unfortunate error of transcription the feminine gender was attributed to this generic name when on 23rd March 1955 this paper was submitted to the Commission. For the correction of this error see paragraph 5(1) of the Second Report submitted by the Secretary reproduced in paragraph 15 of *Opinion* 384 (p. 106 of the present volume).

- Arctogalidia Merriam, 1897, Science (n.s.) 5:302 (gender: feminine) (type species, by monotypy through operation of Rule (f) in Article 30 on the replaced name Arctogale Gray (J.E.), [1865]: Paradoxurus trivirgatus Gray (J.E.), 1832, Proc. zool. Soc. Lond. 2(1832)(17):68.
- Atilax Cuvier (G.F.), 1826, in Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), Hist. nat. Mammif. 3(54): "Vansire" 2 et Tab. (gender: masculine) (type species, by original designation: Herpestes paludinosus Cuvier (G.L.C.F.D.), 1829, Règne Anim. (ed. 2) 1: 158)
- Bassariscus Coues, 1887, Science 9:516 (gender: masculine) (type species, by monotypy through operation of Rule (f) on the replaced name Bassaris Lichtenstein, [1830]: Bassaris astuta Lichtenstein, [1830], Abh. ph.-Kl. K. preuss. Acad. Wiss., Berlin 1827:119)
- Bdeogale Peters, 25th June 1850, Spenersch. Ztg. 1850: 25 (also, later in 1850, in Vossisch. Ztg.) (gender: feminine) (type species, by selection by Thomas (M.R.O.) (1882, Proc. zool. Soc. Lond. 1882: 81): Bdeogale crassicauda Peters, February 1852, Monatsber. K. preuss. Acad. Wiss., Berlin 1852: 81; id., [post Feb.] 1852, Naturwiss. Reise Mossambique [sic] 1:119, 120, pl. 27)
- Civettictis Pocock, 1915, Proc. zool. Soc. Lond. 1915(1): 134, 139 (gender: feminine) (type species, by monotypy: Viverra civetta Schreber, [1777], Die Säugthiere 3: 418; id., [1778], ibid.: pl. 111)
- Conepatus Gray (J.E.), 1837, Mag. nat. Hist. (n.s.) 1:581 (gender: masculine) (type species, by monotypy: Conepatus humboldtii Gray (J.E.), 1837, Mag. nat. Hist. (n.s.) 1:581)
- Crossarchus Cuvier (G.F.), 1825, in Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), Hist. nat. Mammif. 3(47): "Mangue" 3 et Tab. (gender: masculine) (type species, by original designation: Crossarchus obscurus Cuvier (G.F.), 1825, in Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), Hist. nat. Mammif. 3(47): "Mangue" 3 et Tab.)

- Cryptoprocta Bennett, 1833, Proc. zool. Soc. Lond. 1(1833)(4): 46 (gender: feminine) (type species, by original designation: Cryptoprocta ferox Bennett, 1833, Proc. zool. Soc. Lond. 1(1833)(4): 46)
- Cuon Hodgson, 1838, Ann. nat. Hist. 1: 152 (gender: masculine) (type species, by monotypy: Cuon primaevus Hodgson, 1838, Ann. nat. Hist. 1: 152)
- Cynogale Gray (J.E.), [1837], Proc. zool. Soc. Lond. 4(46): 88 (gender: feminine) (type species, by monotypy: Cynogale bennettii Gray (J.E.), [1837], Proc. zool. Soc. Lond. 4(46): 88)
- Enhydra Fleming, 1822, *Philosophy Zool.* 2: 187 (gender: feminine) (type species, by monotypy: Mustela lutris Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1: 45)
- Eupleres Doyère, 1835, Bull. Soc. Sci. nat. France 1835(3): 45; (5): 103; id., 1835 [later than above paper], Ann. Sci. nat., Paris (2) (Zool.) 4: 280, pl. 8 (gender: feminine) (type species, by monotypy: Eupleres goudotii Doyère, 1835, Bull. Soc. Sci. nat. France 1835(3): 45)
- Fennecus Desmarest, 1804, Nouv. Dict. Hist. nat. 24(Tab.): 18 (gender: masculine) (type species, by original designation: Fennecus arabicus Desmarest, 1804, Nouv. Dict. Hist. nat. 24 (Tab.): 18)
- **Helarctos** Horsfield, 1825, *Zool. J.* **2**(6): 221 (gender: masculine) (type species, by original designation: **Helarctos euryspilus** Horsfield, 1825, *Zool. J.* **2**(6): 221)
- Helictis Gray (J.E.), 1831, Proc. zool. Soc. Lond. 1(1830/31)(8): 94 (gender: feminine) (type species, by monotypy: Helictis moschata Gray (J.E.), 1831, Proc. zool. Soc. Lond. 1(1830/31)(8): 94)
- Helogale Gray (J.E.), [1862], Proc. zool. Soc. Lond. 1861: 308 (gender: feminine) (type species, by selection by Thomas (M.R.O.) (1882, Proc. zool. Soc. Lond. 1882: 79): Herpestes parvulus Sundevall, 1846, Ofvers. K. svensk. Vet.-Akad. Forhandl., Stockholm 3 (No. 5): 151)

- Herpestes (emend. of Herpertes) Illiger, 1811, Prodr. Syst. Mamm. Avium: 135 (as Herpertes), 303 (emend. to Herpestes) (gender: masculine) (type species, by absolute tautonymy through operation of Rule (f) in Article 30 on the replaced name Ichneumon Lacépède, 1799: Viverra ichneumon Linnaeus, 1758, Syst. Nat. (ed. 10) 1:43)
- Ichneumia Geoffroy Saint-Hilaire (I.), 1837, C.R. Acad. Sci. nat., Paris 5:580; id., 1837 [later than the above paper], Ann. Sci. nat., Paris (2) (Zool.) 8:251 (gender: feminine) (type species, by selection by Geoffroy Saint-Hilaire (1839, Mag. Zool. (2) 1:4): Herpestes albicaudus Cuvier (G.L.C.F.D.), 1829, Règne Anim. (ed. 2) 1:158)
- Lycaon Brookes, 1827, in Griffith's Cuvier, Anim. Kingd. (Mamm.) 5 Syn.: 151 (gender: masculine) (type species, by monotypy: Lycaon tricolor Brookes, 1827, in Griffith's Cuvier, Anim. Kingd. (Mamm.) 5 Syn.: 151)
- Melursus Meyer, 1793, Zool. Entdeck. Neuholland u. Afrika: 155 (gender: masculine) (type species, by monotypy: Melursus lybius Meyer, 1793, Zool. Entdeck. Neuholland u. Afrika: 156)
- Mungos Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795, Mag. encyclop. 2(6): 187 (gender: masculine) (type species, by selection by Muirhead ([1819], Edinburgh Ency. 13: 415), when emending the name Mungos to Mungo: Viverra mungo Gmelin, 1788, in Linnaeus, Syst. Nat. (ed. 13) 1(1): 84)
- Mydaus Cuvier (G.F.), 1821, in Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), Hist. nat. Mammif. 2(27): "Telagon" 2 (gender: masculine) (type species, by monotypy: Mydaus meliceps Cuvier (G.F.), 1821, in Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), Hist. nat. Mammif. 2(27): "Telagon" 2)
- Nandinia Gray (J.E.), 1843, List. Mamm. Coll. Brit. Mus.: 54 (gender: feminine) (type species, by monotypy: Viverra binotata Gray (J.E.), 1830, Spicil. zool. (2): 9)

- Otocyon Müller (J.), 1836, Arch. f. Anat. Physiol. u. Wissensch. Medicin 1836: l (gender: masculine) (type species, by monotypy: Otocyon caffer Müller (J.), 1836, Arch. f. Anat. Physiol. u. Wissensch. Medicin 1836: l)
- Paradoxurus Cuvier (G.F.), 1821, in Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), Hist. nat. Mammif. 2(24): "Martre des Palmiers" 5 et Tab. 1 (gender: masculine) (type species, by indication under Rule (b) in Article 30: Paradoxurus typus Cuvier (G.F.), 1821, in Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1821, Hist. nat. Mammif. 2(24): "Martre des Palmiers" 5 et Tab. 1)
- Poecilogale Thomas (M.R.O.), 1883, Ann. Mag. nat. Hist. (5) 11: 370 (gender: feminine) (type species, by monotypy: Zorilla albinucha Gray (J.E.), 1864, Proc. zool. Soc. Lond. 1864: 69, pl. 10)
- Poiana Gray (J.E.), [1865], Proc. zool. Soc. Lond. 1864: 507, 520 (gender: feminine) (type species, by monotypy: Genetta richardsonii Thomson (T.R.H.), 1842, Ann. Mag. nat. Hist. 10: 204)
- Proteles Geoffroy Saint-Hilaire (I.), [Sept.] 1824, Bull. Sci. Soc. philomat. Paris 1824: 139; id., [post Sept.] 1824, Mém. Mus. Hist. nat., Paris 11: 355, pl. 20 (gender: masculine) (type species, by original designation: Proteles lalandii Geoffroy Saint-Hilaire (I.), 1824, Bull. Sci. Soc. philomat. Paris 1824: 139)
- Pteronura Gray (J.E.), 1837, Mag. nat. Hist. (n.s.) 1:580 (gender: feminine) (type species, by monotypy: Pteronura sambachii Gray (J.E.), 1837, Mag. nat. Hist. (n.s.) 1:580)
- Rhynchogale Thomas (M.R.O.), 1894, Proc. zool. Soc. Lond. 1894: 139 (gender: feminine) (type species, by monotypy through operation of Rule (f) in Article 30 on the replaced name Rhinogale Gray (J.E.), [1865]: Rhinogale melleri Gray (J.E.), [1865], Proc. zool. Soc. Lond. 1864: 575, text-fig.)

- Spilogale Gray (J.E.), 1865, Proc. zool. Soc. Lond. 1865: 150 (gender: feminine) (type species, by monotypy: Mephitis interrupta Rafinesque, 1820, Annals of Nature: 3)
- Suricata Desmarest, 1804, Nouv. Dict. Hist. nat. 24(Tab.): 15 (gender: feminine) (type species, by monotypy: Suricata capensis Desmarest, 1804, Nouv. Dict. Hist. nat. 24(Tab.): 15)
- Taxidea Waterhouse (G.R.), 1839, Proc. zool. Soc. Lond. 6(71): 153 (gender: feminine) (type species, by monotypy: Ursus labradorius Gmelin, 1788, in Linnaeus, Syst. Nat. (ed. 13) 1(1): 102)
- Thalarctos Gray (J.E.), 1825, Ann. Phil. 26: 62 (gender: masculine) (type species, by monotypy: Thalarctos polaris Gray (J.E.), 1825, Ann. Phil. 26: 62)
- Urocyon Baird, 1857, Mamm. N. Amer.: 121, 138 (gender: masculine) (type species, by selection by Elliot ([March] 1901, Field Mus. Publ. (Zool.) 2:307) [also in December 1901, by Miller & Rehn, Proc. Boston Soc. nat. Hist. 30:202—204]: Canis virginianus Schreber, [1776], Die Säugthiere 3:361, pl. 92, B)
- Viverra Linnaeus, 1758, Syst. Nat. (ed. 10) 1:43 (gender: feminine) (type species, by selection by Sclater (W.L.) (1900, Fauna S. Africa (Mamm.) 1:50): Viverra zibetha Linnaeus, 1758, Syst. Nat. (ed. 10) 1:44)
- Viverricula Hodgson, 1838, Ann. nat. Hist. 1(2): 152 (gender: feminine) (type species, by selection by Sclater (W.L.) (1891, Cat. Mamm. Ind. Mus. 2: 238): Viverra indica Desmarest, 1804, Nouv. Dict. Hist. nat. 24(Tab.): 17)

- Vormela Blasius, 1884, Ber. naturf. Ges. Bamberg 13:9, 14 (gender: feminine) (type species, by original designation: Mustela sarmatica Pallas, 1771, Reise. Prov. russ. Reichs 1:453)
- Xenogale Allen, 1919, J. Mamm. 1:27 (gender: feminine) (type species, by original designation: Xenogale microdon Allen, 1919, J. Mamm. 1:27)
- Section B:—Six generic names, each of which is an available name and each of which is accepted by some, but not all, mammalogists as the oldest name for a valid genus or subgenus
 - (Note:—Under a General Directive issued to it by the International Congress of Zoology (1950, Bull. zool. Nomencl. 4:237, 268) the International Commission is required, when specialists are divided on the question whether one or more genera are taxonomically involved, to place on the Official List of Generic Names in Zoology all the generic names concerned, with a note in the case of each of the later published names that it is placed on the Official List for use by those specialists who consider on taxonomic grounds that its type species is not congeneric (or consubgeneric) with the type species of the nominal genus having the older name.)
- Galerella Gray (J.E.), [1865], Proc. zool. Soc. Lond. 1864: 564 (gender: feminine) (type species, by monotypy: Herpestes ochraceus Gray (J.E.), 1849, Proc. zool. Soc. Lond. 16(189): 138) (for use by those specialists who consider on taxonomic grounds that Galerella Gray is distinct from Herpestes Illiger, 1811)
- Icticyon Lund, 1842, Overs. K. Danske Vid. Selsk. Forhandl. Kjobenhavn 1842(6): 80 (gender: masculine) (type species, by monotypy through operation of Rule (f) in Article 30 on the replaced name Cynogale Lund, 1842: Icticyon venaticus Lund, 1842, Overs. K. Danske Vid. Selsk. Forhandl. Kjobenhavn 1842 (6): 80) (for use by those specialists who consider on taxonomic grounds that Icticyon Lund is distinct from the fossil genus Speothos Lund, 1839)

- Leucomitra Howell, 1901, N. Amer. Fauna 20: 39 (gender: feminine) (type species, by monotypy: Chincha macroura Lichtenstein, 1832, Darstell. Säugth.: text to pl. 46) (for use by those specialists who consider on taxonomic grounds that Leucomitra Howell is distinct from Mephitis Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795)
- Lutreola Wagner, 1841, in Schreber, Die Säugthiere, Suppl. 2: 239 (gender: feminine) (type species, by absolute tautonymy: Viverra lutreola Linnaeus, 1761, Faun. svec. (ed. 2): 5) (for use by those specialists who consider on taxonomic grounds that Lutreola Wagner is distinct from Mustela Linnaeus, 1758 as currently interpreted)
- Oryctogale Merriam, 1902, Proc. biol. Soc. Wash. 15:161 (gender: feminine) (type species, by original designation: Mephitis leuconota Lichtenstein, [1832—1834], Darstell. Säugth. (9): text to pl. 44, fig. 1) (for use by those specialists who consider on taxonomic grounds that Oryctogale Merriam is distinct from Conepatus Gray (J.E.), 1837)
- Paracynictis Pocock, 1916, Ann. Mag. nat. Hist. (8) 17:177 (gender: feminine) (type species, by original designation: Cynictis selousi de Winton, 1896, Ann. Mag. nat. Hist. (6) 18:469) (for use by those specialists who consider on taxonomic grounds that Paracynictis Pocock is distinct from Cynictis Ogilby, 1833)
- Section C:—One generic name not included in Dr. Stiles' application which is regarded by some specialists as a senior subjective synonym of a name which was included in that application and which is now proposed to be placed on the "Official List of Generic Names in Zoology"
- Speothos Lund, [April] 1839, Ann. Sci. nat., Paris (2) (Zool.) 11: 224 [also, later in 1839, Echo Monde savant 5(No. 430): 245]

(gender: masculine) (type species, by monotypy: Speothos pacivorus Lund, 1839, Ann. Sci. nat., Paris (2) (Zool.) 11: 224)

(Note:—The nominal genus Speothos Lund, 1839, is subjectively identified by some specialists with the nominal genus Icticyon Lund, 1842. By such specialists the name Icticyon Lund is treated as a junior subjective synonym of Speothos Lund. Under the General Directive referred to in the Note to Section B of the present Appendix, the Commission is required by the Congress in such a case to place both names on the Official List of Generic Names in Zoology, subject, in the case of the later-published name, to the addition of a note that the laterpublished name is placed on the Official List for use by specialists who consider on taxonomic grounds that the genus so named is distinct from that bearing the older name. In the present case it has been proposed that the name Icticyon Lund should, subject to the addition of such a note, be placed on the Official List of Generic Names in Zoology (see Section B of the present Appendix). It is here proposed that the older of the two generic names concerned, which it is agreed is the name of a taxonomically valid genus should, as such, now be placed on the Official List.)

Section D:—One generic name not included in Dr. Stiles' application which is a senior subjective synonym of a name which was included in that application but which is not now proposed to be included in the "Official List of Generic Names in Zoology"

Acinonyx Brookes, 1828, Cat. anat. zool. Mus. J. Brookes: 16 (gender: masculine) (type species, by monotypy: Acinonyx venator Brookes, 1828, Cat. anat. zool. Mus. J. Brookes: 16)

(Note:—The applicant in the present case asked that the generic name Cynailurus Wagler, 1830 (Nat. Syst. Amph.: 30) should be placed on the Official List of Generic Names in Zoology. It has been shown, however, (Hollister, 1911) (a) that Acinonyx venator Brookes, 1828 (the type species of Acinonyx Brookes, 1828) represents the same taxon as Felis venatica Griffith, 1821 (Descr. Anim. (Carn.): 93); (b) that Felis venatica Griffith is a subspecies of Felis jubata Schreber, [1776] (Die Säugthiere 3: pl. 105; id., [1777], ibid. 3: 392), the type species of Cynailurus Wagler, 1830; and (c) therefore that Cynailurus Wagler, 1830, is a junior subjective synonym of Acinonyx Brookes, 1828.)

- Proposed rejection of proposals for the addition to the "Official List of Generic Names in Zoology" of seven generic names
- Section A:—Two generic names which are regarded by mammalogists as junior subjective synonyms of other generic names
- Cynailurus Wagler, 1830, Nat. Syst. Amph.: 30 (type species, by monotypy: Felix jubata Schreber, [1776], Die Säugthiere 3: pl. 105; id., [1777], ibid. 3: 392) (a junior subjective synonym of Acinonyx Brookes, 1828). (For further particulars see Appendix 1, Section D.)
- Micraonyx Allen, 1919, J. Mamm. 1: 24 (type species, by original designation: Lutra leptonyx Horsfield, 1823 (Zool. Researches Java: (7)) (a junior subjective synonym of Amblonyx Rafinesque, 1832, a name which in Appendix 1, Section A, it is now proposed should be placed on the Official List of Generic Names in Zoology). (The nominal species (Lutra leptonyx Horsfield, 1823) which is the type species of Micraonyx Allen is considered to represent the same taxon as Lutra cinerea Illiger, [1815], which in turn is considered to represent the same taxon as Amblonyx concolor Rafinesque, 1832, the type species (by monotypy) of Amblonyx Rafinesque, 1832).
- Section B:—Five generic names already placed on the "Official List of Generic Names in Zoology"
- Gulo Pallas, 1780 (type species: Mustela gulo Linnaeus, 1758) (Opinion 91)
- Nasua Storr, 1780 (type species: Viverra nasua Linnaeus, 1766) (Opinion 91)
- Procyon Storr, 1780 (type species: Ursus lotor Linnaeus, 1758) (Opinion 91)
- Putorius Cuvier (G.L.C.F.D.), 1817 (type species: Mustela putorius Linnaeus, 1758) (Opinion 91)
- Ursus Linnaeus, 1758 (type species: Ursus arctos Linnaeus, 1758) (Opinion 75)

- Proposed addition of certain names to the "Official Index of Rejected and Invalid Generic Names in Zoology"
- Arctogale Gray (J.E.), [1865], Proc. zool. Soc. Lond. 1864: 508, 528, 542 (a junior homonym of Arctogale Kaup, 1829, Skizz. Entwickel.-Gesch. u. nat. Syst. europ. Thierwelt: 30)
- Bassaris Lichtenstein, [1830], Abk. preuss. Acad. Wiss., Berlin 1827: 119 (a junior homonym of Bassaris Hübner, [1819], Samml. exot. Schmett. 2: pl. [24])
- Cyon Agassiz (J.L.R.), 1846, Nomencl. zool. Index univ. (an Invalid Emendation of Cuon Hodgson, 1838)
- Cynogale Lund, 1842, K. Danske Vet. Selsk. Afh. 9: 203 (a junior homonym of Cynogale Gray (J.E.), [1827], Proc. zool. Soc. Lond. 4 (46): 88)
- **Herpertes** Illiger, 1811, *Prodr. Syst. Mamm. Avium*: 135 (an Invalid Original Spelling for *Herpestes* Illiger, 1811)
- Ichneumon Lacépède, 1799, Tabl. Div. Mamm.: 7 (a junior homonym of Ichneumon Linnaeus, 1758, Syst. Nat. (ed. 10) 1:560)
- Lasiopus Gervais, 1835, Resumé des Leçons de Mammalogie, Paris : 37 (a junior homonym of Lasiopus Schoenherr, 1823, Peric. Entom. (3) : 35)⁵
- Lasiopus Geoffroy Saint-Hilaire (I.), 1839, Mag. Zool. (2) 1:4 (a junior homonym of Lasiopus Schoenherr, 1823 (Peric. Entom. (3): 35) and a junior objective synonym of Ichneumia Geoffroy Saint-Hilaire (I.), 1837)

By an unfortunate oversight this name was omitted at the time when this Appendix was first compiled from the particulars given in Appendix 6 and in consequence did not appear in this Appendix when on 23rd March 1955 this paper was submitted to the Commission. For the correction of this oversight see paragraph 5(3) of the Second Report submitted by the Secretary reproduced in paragraph 15 of Opinion 384 (p. 107 of the present volume).

- Mungo Muirhead, [1819], Edinburgh Ency. 13: 415 (an Invalid Emendation of Mungos Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795)
- Rhinogale Gray (J.E.), [1865], Proc. zool. Soc. Lond. 1864: 573 (a junior homonym of Rhinogale Gloger, 1841, Gemeinnütz. Naturgesch. 1: xxix)
- Taxidia Hodgson, 1847, J. asiat. Soc. Bengal 16: 763 (an Invalid Emendation of Taxidea Waterhouse, 1839)
- Thalarctus Agassiz (J.L.R.), 1846, Nomencl. zool. Index univ. (an Invalid Emendation of Thalarctos Gray (J.E.), 1825)

Proposed addition of names to the "Official List of Specific Names in Zoology"

Section A:—Specific names of the type species of thirty-eight genera, the names of which it is proposed in Appendix 1 should now be placed on the "Official List of Generic Names in Zoology"

(Note:—The original references for the names cited below are not given in the present Section, as they have already been given in Appendix 1.)

Name of genus of which Specific name proposed to be placed on the "Official List species cited in Col. (1) is the of Specific Names in Zoology" type species (2)albicaudus Cuvier (G.L.C.F.D.), Ichneumia Geoffroy Saint-Hilaire (I.), 1837 1829, Herpestes albinucha Gray (J.E.), 1864, Poecilogale Thomas (M.R.O.), 1883 Zorilla astuta Lichtenstein, [1830], Bassariscus Coues, 1887 **Bassaris** bennettii Gray (J.E.), [1837], Cynogale Gray (J.E.), [1837] Cynogale binotata Gray (J.E.), 1830, Nandinia Gray (J.E.), 1843 Viverra binturong Raffles, 1821, Viverra Arctictis Temminck, 1824 Civettictis Pocock, 1915 civetta Schreber, [1777], Viverra Amblonyx Rafinesque, 1832 concolor Rafinesque, 1832, **Amblony**x crassicauda Peters, 1852, Bdeo- Bdeogale Peters, [1850]

gale

Specific name proposed to be placed on the "Official List of Specific Names in Zoology" (1)	Name of genus of which species cited in Col. (1) is the type species (2)
ferox Bennett, 1833, Crypto-procta	Cryptoprocta Bennett, 1833
fulgens Cuvier (G.F.), 1825, Ailurus	Ailurus Cuvier (G.F.), 1825
goudotii Doyère, 1835, Eupleres	Eupleres Doyère, 1835
humboldtii Gray (J.E.), 1837, Conepatus	Conepatus Gray (J.E.), 1837
ichneumon Linnaeus, 1758, Viverra	Herpestes (emend. of Herpertes) Illiger, 1811
indica Desmarest, 1804, Viverra	Viverricula Hodgson, 1838
interrupta Rafinesque, 1820, Mephitis	Spilogale Gray (J.E.), 1865
lagopus Linnaeus, 1758, Canis	Alopex Kaup, 1829
leuconota Lichtenstein, [1832—1834], Mephitis	Oryctogale Merriam, 1902
lutreola Linnaeus, 1761, Viverra	Lutreola Wagner, 1841
lutris Linnaeus, 1758, Mustela	Enhydra Fleming, 1822
macroura Lichtenstein, 1832, Chincha	Leucomitra Howell, 1901
meliceps Cuvier (G.F.), 1821, <i>Mydaus</i>	Mydaus Cuvier, (G.F.) 1821
melleri Gray (J.E.), [1865], Rhinogale	Rhynchogale Thomas (M.R.O.), 1894
microdon Allen, 1919, Xenogale	Xenogale Allen, 1919
moschata Gray (J.E.), 1831, Helictis	Helictis Gray (J.E.), 1831

Specific name proposed to be placed on the "Official List of Specific Names in Zoology" (1) mungo Gmelin, 1788, Viverra	Name of genus of which species cited in Col. (1) is the type species (2) Mungo Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795
obscurus Cuvier (G.F.), 1825, Crossarchus	Crossarchus Cuvier, (G.F.),1825
ochraceus Gray (J.E.), 1849, Herpestes	Galerella Gray (J.E.), [1865]
pacivorus Lund, 1839, Speothos	Speothos Lund, 1839
paludinosus Cuvier (G.L.C.F.D.), 1829, Herpestes	Atilax Cuvier (G.F.), 1826
parvulus Sundevall, 1846, Herpestes	Helogale Gray (J.E.), [1862]
primaevus Hodgson, 1838, Cuon ⁶	Cuon Hodgson, 1838
richardsonii Thomson (T.R.H.), 1842, Genetta	Poiana Gray (J.E.), [1865]
sambachii Gray (J.E.), 1837, Pteronura	Pteronura Gray (J.E.), 1837
selousi de Winton, 1896, Cynic- tis	Paracynictis Pocock, 1916
trivirgatus Gray (J.E.), 1832, Paradoxurus	Arctogalidia Merriam, 1897
venaticus Lund, 1842, Icticyon	Icticyon Lund, 1842

zibetha Linnaeus, 1758, Viverra Viverra Linnaeus, 1758

⁶ For a note on the taxonomic status of the nominal species bearing this name see paragraph 5(4) of the Second Report submitted by the Secretary reproduced in paragraph 15 of *Opinion* 384 (p. 107 of the present volume).

Section B:—Specific names of thirteen nominal species each of which is subjectively identified by specialists with a nominal species having a later name which is the type species of a genus, the name of which it is now proposed should be placed on the "Official List of Generic Names in Zoology"

(Note:—In the present Section the original references are given for the names cited in Col. (1), since these names have not previously been cited in the present Report. References are not given, however, for the names cited in Col. (2), as in each case the reference has already been given in Appendix 1.)

Specific name proposed to be placed on the "Official List of Specific Names in Zoology"

(1)

cinereoargenteus, *Canis*, Schreber, [1776], *Die Säugthiere* 3: 360, pl. 92

cristata, Viverra, Sparrman, 1783, Resa Goda Hopps-Udden 1: 581

hermaphroditus, Viverra, Pallas, [1777], in Schreber, Die Säugthiere 3: 426

malayanus, Ursus, Raffles, 1821, Trans. linn. Soc. Lond. 13(1): 254

maritimus, *Ursus*, Tinnaeus, 1758, *Syst. Nat.* (ed. 10) **1**: 47

Name of nominal species with which the species cited in Col. (1) is subjectively identified by specialists

(2)

Canis virginianus Schreber, [1776] (type species of *Urocyon* Baird, 1857)

Proteles lalandii Geoffroy Saint-Hilaire (I.), 1824, Proteles (type species of Proteles Geoffroy Saint-Hilaire (I.), 1824)

Paradoxurus typus Cuvier (G. F.), 1821 (type species of Paradoxurus Cuvier (G.F.), 1821)

Helarctos euryspilus Horsfield, 1825 (type species of Helarctos Horsfield, 1825)

Thalarctos polaris Gray (J.E.), 1825 (type species of *Thalarctos* Gray (J.E.), 1825)

⁷ For a note on the authorship and publication attributable to this name see paragraph 5(2) of the Second Report submitted by the Secretary reproduced in paragraph 15 of *Opinion* 384 (p. 106 of the present volume).

Specific name proposed to be placed on the "Official List of Specific Names in Zoology"

Name of nominal species with which the species cited in Col. (1) is subjectively identified by specialists

(1)

megalotis, Canis, Desmarest, 1822, Ency. méth., Mamm. (2):538

(2)

Otocyon caffer Müller (J.), 1836 (type species of Otocyon Müller (J.), 1836)

peregusna, Mustela, Gueldenstaedt, 1770, Nov. Comm. Sci. Petrop. 14(1): 441

Mustela sarmatica Pallas, 1771 (type species of Vormela Blasius, 1884)

picta, Hyaena, Temminck, 1820, Lycaon tricolor Brookes, 1827 Ann. gén. Sci. Phys., Bruxelles 3: 54, pl. 35

(type species of Lycaon Brookes, 1827)

suricata, Viverra, Schreber, [1776], Die Säugthiere 3: pl. 97

Suricata capensis Desmarest, 1804 (type species of Suricata Desmarest, 1804)

taxus, Ursus, Schreber, [1777], Die Säugthiere 3:520; id., [1778], ibid. 3: pl. 142B

Ursus labradorius Gmelin, 1788 (type species of Taxidea Waterhouse, 1839)

ursinus, Bradypus, Shaw, 1791, Nat. Miscell. 2: pls. 58-59

Melursus lybius Meyer, 1793 of Melursus (type species Meyer, 1793)

venatica, Felis, Griffith, 1821, Descr. Anim. (Carn.): 93

Acinonyx venator Brookes, 1828 (type species of Acinonyx Brookes, 1828)

1780, Geograph. Gesch. 2: 247

zerda, Canis, Zimmermann, Fennecus arabicus Desmarest, 1804 (type species of Fennecus Desmarest, 1804)

Section C:-Specific names of species of which the type species of genera, the names of which are now proposed to be placed on the "Official List of Specific Names in Zoology", are considered on taxonomic grounds to be subspecies

(Note: -The original references are given below for the names cited in Col. (1) but not for those cited in Col. (2), which have already been given in Appendix 1.)

Specific name proposed to be placed on the " Official List of Specific Names in Zoology"

(1)

alpinus, Canis, Pallas, [1811], Zoograph, ross.-asiat. 1: 348 Nominal species subjectively regarded by specialists as a subspecies of the species cited in Col. (1)

(2)

Cuon primaevus Hodgson, 1838 (type species of Cuon Hodgson, 1838)

cinerea, Lutra, Illiger, [1815], Abk. preuss. Wiss., Berlin 1804-1811:90

Die Säugthiere 3: pl. 105; id., [1777], ibid. 3:392

Amblonyx concolor Rafinesque, 1832 (type species of Amblonyx Rafinesque, 1832)

jubata, Felis, Schreber, [1776], Felis venatica Griffith, 1821, a senior synonym of Acinonyx venator Brookes, 1828 (type species of Acinonyx Brookes, 1828)

By an unfortunate error of compilation at the time when the present Appendix was prepared on the basis of the particulars given in Appendix 6, this entry was placed in Section B instead of in Section C when on 23rd March 1955 this paper was submitted to the Commission. For the correction of this error see paragraph 5(4) of the Second Report submitted by the Secretary reproduced in paragraph 15 of *Opinion* 384 (p. 107 of the present volume).

APPENDIX 5

Eighteen generic names, the consideration of which it is proposed to postpone until later Reports, either because further investigations are required or because current usage can be secured only through the use of the Plenary Powers

Name of genus

Remarks

Aonyx Lesson, 1827, Manuel Mammalog.: 157

The question of the oldest available name for the type species of this genus requires consideration.

Crocuta Kaup, 1828, *Isis* (Oken) **21**: 1145

At present this name is a junior homonym of *Crocuta* Meigen, 1800 (Cl. Insecta, Order Diptera). The question of the suppression of Meigen's pamphlet of 1800 is at present under consideration by the Commission.

Cynictis Ogilby, 1833, *Proc.* zool. Soc. Lond. 1 (1833) (4): 48

The question of the oldest available name for the type species of this genus requires consideration.

Hyaena Brisson, 1762, *Regn.* anim. (ed. 2): 168 **Lutra** Brisson, 1762; ibid.:

oid.:

Meles Brisson, 1762, ibid.: 183

It is considered better to defer action as regards these three names until the Commission considers the application by the late Dr. G. H. H. Tate for a ruling on the question of the availability of new names in Brisson, 1762, Regn. anim. (ed. 2).

Genetta Oken, 1816, Lehrbuch 3 (Zool.) (2): 1010

Grison Oken, 1816, ibid. 3(Zool.) (2):1000

Tayra Oken, 1816, ibid. 3 (Zool.) (2):1001

It is considered better to wait until the Commission has reached a decision on the status of Oken's Lehrbuch (now being voted upon by Commission) before decisions are taken on these names9.

Ictonyx Kaup, 1835, Das Thierr. 1:352

The position of this name is also bound up with question of Oken's Lehrbuch, since the type species of this genus is also the type species of Zorilla Oken, 1816 (: 1000)

Lutrogale Gray (J.E.), 1865, Proc. zool. Soc. Lond. 1865: 127

The question of the species to be accepted as the type species of this genus requires consideration.

Marputius Gray (J.E.), 1837, The position as regards this Mag. nat. Hist. (n.s.) 1:581

name requires further investigation.

Martes Pinel, 1792, Actes Soc. Hist. nat. Paris 1:55, 58 Mustela Linnaeus, 1758, Syst. Nat. (ed. 10) 1:45

The position as regards these names can be cleared up only by the use by the Commission of its Plenary Powers, for present usage of the name Mustela Linnaeus is incorrect, the true type species of this genus being Mustela martes Linnaeus, which is commonly treated as the type species of Martes Pinel.

Since this passage was written the International Commission has rejected Oken's Lehrbuch for nomenclatorial purposes. This decision has been embodied in Opinion 417 (now in the press). The question remaining to be considered is whether the three generic names here listed or any one of them should be validated by the Commission under its Plenary Powers.

Mellivora Storr, 1780, Prodr. It is not yet clear whether this Méth. Mamm.: 34

is an available name¹⁰.

Mephitis Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795, Mag. encyclop. 2(6): 187

The use of the Plenary Powers will be needed if the accepted name for the type species of this genus is to be retained, for that name was not published as a new name, being only a misspelling of another name.

Potos Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795, Mag. encyclop. 2(6): 187

There are several Original Spellings for the name of the type species of this genus, and it is not clear at present which of these spellings is the valid one under the Règles.

Vulpes Oken, 1816, Lehrbuch 3 (Zool.) (2): 1033, 1034

Consideration of this name should be postponed until a decision has been by the Commission on the status of Oken's Lehrbuch11. In addition, there are several usages of this name prior to Oken which will need to be considered. Thus, the position of the name Vulpes as regards both authorship and date, requires further consideration.

The generic name *Mellivora* Storr has since been investigated in the Second Report submitted by the Secretary on Dr. C. W. Stiles' Application Z.N.(S.) 97. By a Vote taken on a supplementary Voting Paper numbered V.P.(O.M.)(55)21 this name has now been placed on the Official List of Generic Names in Zoology.

¹¹ See Footnote 9.

APPENDIX 6

Notes on the seventy-four generic names in the Order Carnivora (Class Mammalia) recommended by the late Dr. C. W. Stiles for admission to the "Official List of Generic Names in Zoology"

The present Appendix contains an alphabetical list of the seventy-four generic names in the Order Carnivora recommended by the late Dr. C. W. Stiles for admission to the Official List of Generic Names in Zoology. In order to economise space and to avoid repetition, bibliographical particulars, including particulars regarding the type species of the genera concerned have been omitted, for the necessary particulars are given in the earlier Appendices enumerating the names now recommended for addition to the Official Lists and Official Indexes. Similarly, only the briefest notes are given in regard to the eighteen generic names, decisions on which, it is recommended, should be deferred for further examination, since it is considered better to postpone the exposition of the difficulties involved in these cases until it is possible to lay a full Report before the Commission for consideration.

- (1) "Ailurus" Cuvier (G.F.), 1825 and
- (2) "Alopex" Kaup, 1829
- 2. No difficulties arise in connection with either of these names.

(3) "Amblonyx" Rafinesque, 1832

3. The type species of the genus Amblonyx Rafinesque, 1832, is the nominal species Amblonyx concolor Rafinesque, 1832. The taxon represented by this nominal species is currently regarded by specialists as being a subspecies of the species Lutra cinerea Illiger, [1815]. In accordance with the Directive given to the

Commission by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. 4: 268), the names concolor Rafinesque and cinerea Illiger should both now be placed on the Official List of Specific Names in Zoology.

(4) "Aonyx" Lesson, 1827

4. The specific name of the type species of this genus is *lalandii* Lesson, 1827, as published in the combination *Aonyx lalandii*, but the species in question is currently known by the senior subjective synonym *capensis* Schinz, 1821, as published in the combination *Lutra capensis*. The investigations carried out in the present case have shown, however, that that name is invalid, being a junior homonym of *capensis* Illiger, [1815], also published in the combination *Lutra capensis*. It is accordingly recommended that a decision should be deferred in the present case in order to permit of further examination of the issues involved.

(5) "Arctictis" Temminck, 1824

5. No difficulties arise in connection with this name.

(6) "Arctogalidia" Merriam, 1897

6. The name Arctogalidia Merriam was published as a nom. nov. for the name Arctogale Gray (J.E.), [1865], which is invalid by reason of being a junior homonym of Arctogale Kaup, 1829 (Skizz. Entwickel.-Gesch. u. nat. Syst. europ. Thierwelt.: 30). The type species of Arctogalidia Merriam is Paradoxurus trivirgatus Gray (J.E.), 1832, under Rule (f) in Article 30, that species having been the type species by monotypy of Arctogale Gray. The latter name should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology at the same time that the name Arctogalidia Merriam is placed on the Official List of Generic Names in Zoology.

(7) "Atilax" Cuvier (G.F.), 1826

7. Cuvier stated that the type species of his genus Atilax was the species to which he then applied the vernacular name "Vansire". This species did not receive a scientific name until 1829 (Règne Anim. (ed. 2) 1:158) when Cuvier (G.L.C.F.D.) gave it the name Herpestes paludinosus. (It may be noted that the species to which Cuvier (G.F.) applied the name "Vansire" in 1826 is not the same species as that to which this vernacular term had previously been applied by Buffon & Daubenton. This latter is the unidentifiable nominal species Mustela galera Schreber, [1776] (Die Säugthiere 3: pl. 135; id., [1777], ibid. 3:495)).

(8) "Bassariscus" Coues, 1887

8. The name Bassariscus Coues was published as a nom. nov. for the name Bassaris Lichtenstein, [1830] (Abh. ph.-Kl. K. preuss. Akad. Wiss., Berlin 1827: 11), which is invalid by reason of being a junior homonym of Bassaris Hübner, [1819] (Samml. exot. Schmett. 2: pl. [24]). The nominal species Bassaris astuta Lichtenstein, [1830], is the type species, by monotypy, of Bassaris Lichtenstein and therefore becomes automatically the type species also of Bassariscus Coues. (It may be noted that Coues himself designated the above species to be the type species of his Bassariscus. For the reason explained above, that species was, however, already the type species without any designation by Coues and his action in this matter was therefore not required.) The name Bassaris Lichtenstein should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology at the same time that the generic name Bassariscus Coues is placed on the Official List of Generic Names in Zoology.

(9) "Bdeogale" Peters, 1850

9. In the application submitted to the Commission in regard to this name, it was treated (correctly as we shall see) as having been first published by Peters in 1850 and its place of publication

was given as "Mitth. naturf. Fr. Berlin, Nov. 19 (n.v.)". On looking into the matter, I found that no volume of Mittheilungen had been issued in the year 1850 by the Gesellschaft Naturforschender Freunde zu Berlin and accordingly that, if the name Bdeogale Peters had, in fact, been published in 1850, publication must have taken place elsewhere.

- 10. An examination of the literature relating to the name Bdeogale Peters shows that what actually happened was as follows. Peters returned in 1848 from Mozambique, where he had spent the years 1842 to 1848 collecting animals. Among the specimens so obtained were examples of two previously unknown mammals, for which in 1852 Peters published the names Bdeogale crassicauda and Bdeogale puisa. At various times from 1850 onwards Peters published in various serial publications both new generic names and new specific names for species which he had obtained, in anticipation of the fully documented publication of those names in his main work on his collections. On 18th June 1850 Peters exhibited at a meeting of the Gesellschaft Naturforschender Freunde zu Berlin specimens of either one or both of the new species of mammal which he informed the meeting he regarded as being distinct generically from any previously described species and for which he proposed to establish a new genus, for which he had selected the generic name Bdeogale.
- 11. From 1775 to 1839 the Gesellschaft published its own Proceedings but it discontinued this practice in the period 1839—1859. In those years, the Minutes of the Meetings of the Gesellschaft were often published in the daily press, either in the Vossische Zeitung or in the Spenersche Zeitung. Often they were published in both these papers. The Minutes of thirty-four of the meetings of the Gesellschaft were never published anywhere. In the early part of the present century the version of the Minutes of the Meetings published in this way was compared with the Minute Books of the Gesellschaft. The Minutes of the Meetings held from 15th January 1839 to 20th December 1859 were at length published in a single volume in 1912.
- 12. The portion of the Minutes relating to the name *Bdeogale* reads as follows (free translation): "Dr. Peters showed a new

genus of mammals, *Bdeogale*, which he had brought from Mossambique [sic]. He mentioned as a distinction that it had, like *Suricata*, only four toes to all feet, whereas it agreed with *Herpestes* in external appearance, in the anatomical structure of the intestines, in the form of the skull and in dentition". The above Minute was published on page 25 of the issue of the *Spenersche Zietung* of 25th June 1850. This therefore is the reference which should be cited as the place where the name *Bdeogale* Peters was first published. Shortly after the publication in the *Spenersche Zeitung* of the Minute containing the foregoing record of Peters' communication regarding his new genus *Bdeogale*, the same Minute was published in the *Vossische Zeitung*.

13. It will be seen from the Minute of the Meeting of the Gesellschaft quoted above that the nominal genus Bdeogale Peters was established as a genus for new species of mammal taken in Mozambique which in general possessed the characters shown by the genus Herpestes but which were distinguished therefrom by the structure of the feet which resembled those seen in the genus Suricata. At that time Peters gave no indication whether one species only or more than one species of the new genus had been discovered. In 1852, however, he published descriptions of two new nominal species, each of which he referred to the genus Bdeogale. These descriptions appeared in February 1852 in Monatsb. K. preuss. Akad. Wiss., Berlin 1852: 81. The nominal species so named were Bdeogale crassicauda Peters and Bdeogale puisa Peters. Later in the same year (1852) Peters published fuller descriptions of both these nominal species in his Naturwiss. Reise Mossambique [sic] 1:119, 120, pl. 27 (Bdeogale crassicauda); ibid. 1:124 pl. 28 (Bdeogale puisa). From the two nominal species named by Peters in 1852 and placed by him in the nominal genus Bdeogale Peters, 1850, Oldfield Thomas in 1882 (Proc. zool. Soc. Lond. 1882:81) selected Bdeogale crassicauda Peters, 1852, to be the type species. (Various authors have cited the name Bdeogale Peters as having been first published either in "1850, S.B.Ges. nat. Freunde Berlin 1850: (November 19)" or in "Mitth. Ges. nat. Freunde Berlin 1850: (November 19)", but both these references are erroneous and must have been taken at second hand, for no Sitzberichte or Mittheilungen were published by the Society in 1850. Further, it may be noted that, even if such publications had existed and the

name *Bdeogale* Peters had been published in the issue of 19th November 1850, that would still not have been the first occasion on which that name was published, for (as shown in paragraph 12 above) the name *Bdeogale* Peters was first published (in the *Spenersche Zeitung*) on 25th June 1850.)

14. It has sometimes been urged that new scientific names published in newspapers and elsewhere in the non-scientific press should be disregarded and therefore that, in a case such as the present, the name *Bdeogale* Peters should be treated as ranking for purposes of priority not from 25th June 1850, when Peters' short description of the nominal genus so named was published in the newspaper Spenersche Zeitung but from February 1852, the date on which Peters' paper containing this name was first published in a scientific work (Monatsb. K. preuss. Akad. Wiss., Berlin). At no time, however, have the Règles contained any provision limiting the definition of publication (as used in Article 25) in such a way as to exclude from its scope publication in the non-scientific press. This matter was considered by the Commission at its Session held in Paris in July 1948 when it was agreed (Paris Session, 7th Meeting, Conclusion 15) to recommend the Congress to define the expression "divulgué dans une publication" in such a way as to make it clear, inter alia, that a name was not disqualified from consideration by reason of having been published in the non-scientific press (1950, Bull, zool. Nomencl. 4:217-220) but that a Recommandation should be added to Article 25 urging authors not to publish in the nonscientific press zoological or palaeontological papers containing new names (1950, ibid. 4: 221, Point (1)(b)). These recommendations were supported by the Section on Nomenclature and on the joint recommendation of the Commission and the Section were approved by the Thirteenth Congress at its Final Plenary Session. In the light of these decisions, it is now clear beyond all possibility of dispute not only that the name Bdeogale Peters was first published in June 1850 in the Spenersche Zeitung but also that it was validly so published.

(10) "Civettictis" Pocock, 1915

15. No difficulties arise in connection with this name.

(11) "Conepatus" Gray (J.E.), 1837

16. In the application submitted to the Commission, the specific name humboldtii Gray, 1837, was treated as a junior synonym of the specific name conepatl Gmelin, 1788. In other words, the nominal species Conepatus humboldtii Gray, 1837, and Viverra conepatl Gmelin, 1788 (in Linnaeus, Syst. Nat. (ed. 13) 1(1) :88) were subjectively identified as representing the same taxon. Prior to the submission of the present application this synonymy had been considered by Commissioner Angel Cabrera, who considered it to be incorrect. Writing on this subject, Commissioner Cabrera stated (in litt., 25th September 1931): "The name conepatl Gmel. has nothing to do here, being not a synonym of humboldti, which is the type of the genus; humboldti is a Patagonian species, whereas conepatl is utterly undeterminable, but surely from Mexico or Central America". This correspondence illustrates the wisdom of the decision subsequently taken by the International Congress that entries on the Official List shall be limited to entries recording objectively ascertained nomenclatorial facts and that no place shall be given in the List to subjective synonymisations.

(12) "Crocuta" Kaup, 1828

17. The generic name *Crocuta* Kaup, 1828, is invalid, being a junior homonym of *Crocuta* Meigen, 1800 (Class Insecta, Order Diptera). An application has been received, and is now being considered by the Commission, for the suppression under the Plenary Powers of Meigen's *Nouvelle Classification des Mouches à deux Ailes*, the work in which the name *Crocuta* Meigen was published. In addition, a separate application has been received from the mammalogy side for the validation of the name *Crocuta* Kaup by the suppression of the name *Crocuta* Meigen. As a matter of procedure, it is proposed to seek a decision in the present case by co-ordinating the foregoing applications. It is proposed that a decision on this name, as it arises on the present application, should accordingly be deferred.

(13) "Crossarchus" Cuvier (G.F.), 1825

and

(14) "Cryptoprocta" Bennett, 1833

18. No difficulties arise in connection with either of these names.

(15) "Cuon" Hodgson, 1838

- 19. Two points need to be noted in connection with the generic name Cuon Hodgson, 1838. These are:—
 - (a) The nominal species *Cuon primaevus* Hodgson, 1838, is considered by specialists to represent a taxon currently looked upon as being a subspecies of *Canis alpinus* Pallas, [1811]*. In these circumstances the names *primaevus* Hodgson and *alpinus* Pallas should both now be placed on the *Official List of Specific Names in Zoology*.
 - (b) The name Cuon Hodgson was emended to Cyon by Agassiz in 1846. This is an Invalid Emendation and, as such, should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology at the same time that this generic name in its valid original spelling Cuon Hodgson is placed on the Official List of Generic Names in Zoology.

(16) "Cynailurus" Wagler, 1830

20. The type species of this genus is Felix jubata Schreber, [1776]. In this connection, it is necessary to note (a) that specialists currently accept the taxon represented by the nominal species Felis venatica Griffith, 1821, as being a subspecies of Felix jubata Schreber; (b) that the name Acinonyx venator

^{*} This name was published in Pallas' Zoographia rosso-asiatica, a work, regarding the dates of publication of which there was doubt until the matter was settled by the Commission in its Opinion 212 (1954, Ops. Decls. int. Comm. zool. Nomencl. 4:15—24).

Brookes, 1828, is currently treated as a junior subjective synonym of *Felis venatica* Griffith; and (c) that *Acinonyx venator* Brookes is the type species of the nominal genus *Acinonyx* Brookes, 1828. Thus, according to current taxonomic ideas the nominal genera *Cynailurus* Wagler and *Acinonyx* Brookes are subjectively identical with one another, and the name *Cynailurus* Wagler, 1830, is a junior subjective synonym of *Acinonyx* Brookes, 1828.

21. In these circumstances it is recommended that the Commission should reject the application for the admission of the generic name Cynailurus Wagler to the Official List of Generic Names in Zoology but that it should place the name Acinonyx Brookes on that List. At the same time, the names jubata Schreber, [1776], and venatica Griffith, 1821 (but not its junior subjective synonym venator Brookes, 1828) should be placed on the Official List of Specific Names in Zoology.

(17) "Cynictis" Ogilby, 1833

22. The type species of Cynictis Ogilby is Cynictis steedmanni Ogilby, 1833, by monotypy. The name steedmanni Ogilby is not currently regarded by specialists as the oldest available name for the taxon to which Ogilby gave the above name. The investigations undertaken in the present case show, however, that the name currently applied to this species is itself invalid by reason of being a junior homonym of an identical name. It is accordingly proposed that a decision on the present case should be deferred in order to permit of further investigation of the issues involved.

(18) "Cynogale" Gray (J.E.), [1837]

23. No difficulties arise in connection with this name.

(19) "Enhydra" Fleming, 1822

- 24. Two points need to be noted in connection with the generic name *Enhydra* Fleming, 1822. These are:—
 - (a) The name *Enhydra* Fleming was rejected by Palmer (*N. Amer. Fauna* **25** : 258—259) on the ground that it was a junior

homonym of "Enhydris Merrem". This contention was incorrect, for it ran counter to the definition of the expression "homonym" annexed to Article 36 of the Règles by the Berlin Congress of 1901. Those Règles were not, however, published until 1905 and were therefore not available to Palmer when he advanced the This aspect of the Règles was foregoing argument. underlined by the Fourteenth International Congress of Zoology, Copenhagen, 1953, which inserted in Article 34 a provision that: "A generic name is not to be treated as a homonym of another such name if it differs from it in spelling by even one letter" (1953, Copenhagen Decisions zool. Nomencl.: 78, Decision 152). (It may be noted incidentally that there is no such generic name as Enhydris Merrem. There is, however, a name Enhydris Latreille, 1801 (Suite à Deterville (ed. Buffon), Rept. 4: 200), to which Palmer's argument would have been applicable if it had been validly conceived.)

(b) In the application submitted in this case the type species of the genus Enhydra Fleming was cited as "Lutra marina Steller". This name was, however, published before 1758 and therefore before the starting point of zoological nomenclature. As such, it possesses no status of availability until "re-inforcement by adoption or acceptance" by an author writing subsequent to 1758 (see decision by the International Congress of Zoology embodying the Ruling previously given in Opinion 5 (1950, Bull. zool. Nomencl. 4: 150)). In the present case it is not necessary to examine the question whether, and, if so, when the name Lutra marina acquired the status of availability in the manner described above, for the species so termed by Steller was given the name Mustela lutris by Linnaeus in 1758 and that name by reason of its date is automatically the oldest available name for this species.

(20) "Eupleres" Doyère, 1835

25. The only point which calls for note in connection with the name *Eupleres* is that it was published as a new name twice in the

same year. Of the two papers concerned, the first to be published was that which appeared in the *Bull. Soc. Sci. nat. France*.

(21) "Fennecus" Desmarest, 1804

26. The type species of this genus is Fennecus arabicus Desmarest, 1804. This nominal species is subjectively identified by specialists with the nominal species Canis zerda Zimmermann, 1780. In consequence, the name arabicus Desmarest, 1804, is currently treated as a junior subjective synonym of zerda Zimmermann, 1780. In these circumstances the name zerda Zimmermann and not the name arabicus Desmarest should be placed on the Official List of Specific Names in Zoology at the time when the generic name Fennecus Desmarest is placed on the Official List of Generic Names in Zoology.

(22) "Galerella" Gray (J.E.), [1865]

27. In the application submitted to the Commission in this case, the type species was cited as "ochracea Gerrard so. gracilis Rüppell". In other words Dr. Stiles subjectively identified the taxonomic species represented by Herpestes ochraceus Gray with the taxonomic species represented by Herpestes gracilis Rüppell, 1836 (Neue Wirbelth. Abyssin. (7): 29). (The attribution of the specific name ochracea to "Gerrard" instead of to Gray was no doubt copied from Palmer, 1904 (Fauna N. Amer. 23: 289) where the same erroneous attribution was made.) This synonymy of the names Herpestes ochracea Gray and Herpestes gracilis Rüppell was examined and rejected by Thomas in 1928 (Ann. Mag. nat. Hist. (10) 2: 408) and again in 1929 (Proc. zool. Soc. Lond. 1929: 108). On the first of these occasions Thomas expressed the view that the taxa represented by these

¹² Canis zerda Zimmermann, 1780, the name currently regarded as the oldest available name for the type species of the genus Fennecus Desmarest, was published in the work entitled Geographische Geschichte des Menschen. In view of the fact that in the past there has been argument regarding the status of this book and also regarding that of the earlier work by Zimmermann entitled Specimen Zoologiae geographicae, it may be useful to recall that this matter has now been the subject of consideration by the International Commission, which has ruled against the availability of the Specimen Zoologiae but in favour of the slightly later Geographische Geschichte. See Opinion 257 (Ops. Decls. int. Comm. zool. Nomencl. 5: 231—244.

nominal species were not even congeneric with one another and established the new genus Myonax Thomas, 1928 (Ann. Mag. nat. Hist. (10) 2:408) for Herpestes gracilis Rüppell, which he thus removed altogether from the genus Galerella Gray. For the foregoing reasons Commissioner Angel Cabrera, when consulted about the present application by the late Commissioner Stiles expressed the view (in litt., 21st September 1931)* that the species discussed above were not even congeneric with one another and that all reference to Herpestes gracilis Rüppell should be omitted from the decision to be taken by the Commission in regard to the name Galerella Gray.

28. Towards the close of the investigation covered by the present Report, I noted that Simpson (1945, Bull. Amer. Mus. nat. Hist. 85: 117) had synonymised Galerella Gray, [1865], with Herpestes Illiger, 1811. It was at once evident that, if this represented the general view of specialists, the name Galerella Gray ought not to be placed on the Official List; while, if some specialists held that on taxonomic grounds the taxon represented by the nominal genus Galerella Gray was required as a genus or at least as a subgenus, then, for the reasons set out in the late Commissioner Stiles' application, it would be desirable that the name Galerella Gray should be added to the Official List with an endorsement that it was so added for use by those workers who regarded its type species (Herpestes ochraceus Gray, 1849) as generically or subgenerically distinct from the type species (Viverra ichneumon Linnaeus, 1758) of Herpestes Illiger, 1811. The question at issue being purely taxonomic in character, I turned for advice and guidance to leading specialists in mammalogy. The advice so received was as follows:—

(a) Advice received from Commissioner H. Boschma, Rijksmuseum van Natuurlijke Historie, Leiden (letter dated 13th June 1947):—

Allen (1924, Bull. Amer. Mus. nat. Hist. 47: 175) and Allen (1939, Bull. Mus. comp. Zool. 83: 210) has Galerella as a distinct genus. . . . This argument is of sufficient strength in my opinion. . . . As Herpestes and Galerella have different type species, nobody can prove that the two are symonyms or not. It seems to me advisable to place both generic names on the Official List.

^{*} See the note by Dr. Cabrera incorporated by Dr. Stiles in his original application (: 91).

(b) Advice received from Dr. W. H. H. Tate, American Museum of Natural History, New York (letter dated 13th June 1947):—

Allen (1939: 210) recognised Galerella as a full genus. Simpson (1945) placed it in generic synonymy with Herpestes. It may be distinct subgenerically. Dr. J. E. Hill advise me that Galerella should definitely not have a rank higher than a subgenus, this despite the fact that he gave it full generic rank in his paper (Hill & Carter, 1941, Bull. Amer. Mus. nat. Hist. 78: 127).

(c) Advice received from Dr. Philip Hershkovitz, Chicago Natural History Museum (letter dated 3rd July 1947):—

The type species of Galerella and Herpestes have never been regarded as conspecific. Allen (1939) lists Galerella as a full genus, as do, also, Hill & Carter (Mammals of Angola, 1941). Simpson (1945) lists Herpestes "including Galerella Gray, 1864..." which means, according to his explanation (:36) that Galerella is "tentatively considered as of less than generic rank. The most probable inference is that it can be considered as a subgenus...".

(d) Advice received from Dr. Remington Kellogg, United States National Museum, Washington, D.C. (letter dated 9th July 1947):—

The last work on the viverrids is that of Wm. K. Gregory (1939, Proc. Amer. phil. Soc. 81(3): 372, 377, 378). Gregory groups the herpestid genera according to adaptive trends of their dentition and skulls. In the first group he places Herpestes, Atilax, Xenogale, Ichneumia, and Bdeogale. The second group contains Calogale, Galerella, and Cynictis. Included in the third group are Helogale, Crossarchus, Mungos, and Suricata. Some at least of the recent mammalogists would not consider Galerella a synonym of Herpestes.

29. In view of the information set out in the preceding paragraph it is clear that the type species of *Galerella* Gray, namely *Herpestes ochraceus* Gray (J.E.), 1849, is regarded by some, but not by all, specialists as being congeneric with *Viverra ichneumon* Linnaeus, 1758, the type species of *Herpestes* Illiger, 1811. Accordingly, under the procedure prescribed by the International Congress of Zoology for adoption in such cases (1950, *Bull. zool. Nomencl.* 4: 237, 268), the name *Galerella* Gray, [1865], should

be placed on the *Official List* with an endorsement that it is so placed for use by those specialists who consider on taxonomic grounds that *Galerella* Gray is distinct from *Herpestes* Illiger.

(23) "Genetta" Oken, 1816 and (24) "Grison" Oken, 1816

30. Both these names were published in Oken's Lehrbuch der Naturgeschichte, a work, the status of which is at the present time under examination by the Commission (Hemming, 1954, Bull. zool. Nomencl. 9: 193—207)¹³. It is accordingly proposed that the consideration of the application relating to the names Genetta Oken and Grison Oken be deferred until the situation has been cleared through a decision by the Commission on the general question of the status of the Lehrbuch.

(25) "Gulo" Pallas, 1780

31. The name *Gulo* Pallas, 1780, has already been placed on the *Official List* by the Ruling given by the Commission in its *Opinion* 91. Accordingly, no action is called for in this case.

(26) "Helarctos" Horsfield, 1825

32. The type species of this genus is *Helarctos euryspilus* Horsfield, 1825. This nominal species is subjectively identified by specialists with the nominal species *Ursus malayanus* Raffles, 1821. In consequence, the name *euryspilus* Horsfield, 1825, is currently treated as a junior subjective synonym of *malayanus* Raffles, 1821. In these circumstances the name *malayanus* Raffles and not the name *euryspilus* Horsfield should be placed on the *Official List of Specific Names in Zoology* at the time when the generic name *Helarctos* Horsfield is placed on the *Official List of Generic Names in Zoology*.

¹³ The question of the status of names in Oken's *Lehrbuch* has since been settled by the International Commission. See Footnote 9 (: 144).

(27) "Helictis" Gray (J.E.), 1831 and

(28) "Helogale" Gray (J.E.), [1862]

33. No difficulties arise in connection with either of these names.

(29) "Herpestes" Illiger, 1811

- 34. The following points call for note in connection with the generic name *Herpestes* Illiger:—
 - (a) This generic name was spelled Herpertes on the first page (:135) where it appeared but later in the same book (:303) this spelling was corrected to Herpestes. The latter is a Valid Emendation, having been made by the author himself in the book in which the misspelling Herpertes appeared. In consequence, the Invalid Original Spelling Herpertes should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology at the same time that this generic name in the validly emended form Herpestes is placed on the Official List of Generic Names in Zoology.
 - (b) The generic name *Herpestes* Illiger was published as a nom. nov. for the name *Ichneumon* Lacépède, 1799, which is invalid by reason of being a junior homonym of *Ichneumon* Linnaeus, 1758 (Class Insecta, Order Hymenoptera). The type species of *Ichneumon* Lacépède is *Viverra ichneumon* Linnaeus, 1758, by absolute tautonymy. By the operation on the rejected name *Ichneumon* Lacépède and on its substitute *Herpestes* Illiger of Rule (f) in Article 30, the above species is automatically the type species also of *Herpestes* Illiger.
 - (c) Under the regulations governing the Official Lists and Official Indexes the generic name Ichneumon Lacépède, 1799, should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology at the same time that the name Herpestes Illiger is placed on the Official List of Generic Names in Zoology.

(30) "Hyaena" Brisson, 1762

35. The name *Hyaena* Brisson was published in the Second Edition (the first post-1757 edition) of Brisson's *Regnum Animale*. The question of the availability of that work is at present under examination by the Commission, and it is accordingly proposed that the suggested addition of the name *Hyaena* Brisson to the *Official List* should be deferred until after a decision has been taken by the Commission on the question of principle involved.

(31) "Ichneumia" Geoffroy Saint-Hilaire (I.), 1837

- 36. The generic name *Ichneumia* was published by Isidore Geoffroy Saint-Hilaire twice in the year 1837, first in *C.R. Acad. Sci. nat.*, Paris 5:580, and second, in *Ann. Sci. nat.*, Paris (2) (Zool.) 8:251. On each occasion he published the generic name as the name of a new genus, that is, without reference to any previously published name, a point which (as will be shown later) it is important to note in view of the allegations made by later authors that Geoffroy published this generic name as a *nom. nov.* for *Lasiopus* (Geoffroy MS.) Gervais, 1835. On both the foregoing occasions Geoffroy included three nominal species in this genus, of which one was *Herpestes albicaudus* Cuvier (G.L.C.F.D.), 1829 (*Règne anim.* (ed. 2) 1:158). On neither occasion did Geoffroy designate a type species for this genus.
- 37. On some date prior to 1835 Geoffroy delivered a series of lectures before the *Académie* in Paris in which it appears that he mentioned a generic name *Lasiopus* which at that time was a manuscript name of his own. It was not until 1839 (i.e. two years after the publication by Geoffroy of the name *Ichneumia*) that Geoffroy himself referred to the name *Lasiopus* in a published paper. In this paper (Geoffroy, 1839, *Mag. Zool.* (2) 1:4) he wrote under the French and Latin heading "*Ichneumie—Ichneumia*": "J'indiquai donc, dans mes leçons, l'*Herpestes penicillatus* et l'*Herpestes albicaudus* comme les types de deux divisions nouvelles que je fis connaître sous les noms de Cynope, *Cynopus*, et de Lasiope, *Lasiopus*". Later in the same paper

(:5) Geoffroy added: "J'ai laissé de côté le nom provisoire de Lasiope pour le substituer celui d'Ichneumie". We see from the foregoing (1) that, although Geoffroy did not publish the name Ichneumia as a substitute name for Lasiopus (and therefore that no action by him in relation to Lasiopus only could have any bearing on the type species of Ichneumia) the name Ichneumia was from Geoffroy's point of view a substitute name for Lasiopus: (2) that in his lectures Geoffroy had indicated Herpestes albicaudus Cuvier, 1829, as the type species of a genus for which at that time no name had been published but to which he referred in his lectures under the manuscript name Lasiopus; (3) that in the paper published in 1839 Geoffroy (a) referred in print for the first time to his manuscript name Lasiopus, (b) stated that he had indicated Herpestes albicaudus Cuvier as the type species of that genus, and (c) that he had published (in 1837) the name Ichneumia in place of the "nom provisoire" Lasiopus. These three statements in Geoffroy's paper of 1839 constitute a definite selection by him of Herpestes albicaudus Cuvier, 1825, as the type species of the nominal genus Ichneumia Geoffroy, 1837, and, as that species was one of the species included in the nominal genus Ichneumia Geoffrov at the time when that generic name was first published, this selection complies with the requirements of Rule (g) in Article 30 and, being the first type selection made for this genus, is the selection which determines its type species.

38. In view of the important (and, in part, confusing) role which the generic name Lasiopus plays in the present case, it is desirable to add the following supplementary note about that name. We have seen that on some date prior to 1835 Geoffroy (by his own evidence as provided in his paper of 1839) mentioned a generic name Lasiopus in a lecture, at the same time stating that Herpestes albicaudus Cuvier, 1829, was the type species of the nominal genus so named. So long as the name Lasiopus remained in this manuscript condition, it possessed no status under the Règles and accordingly, so far as concerns Geoffroy as an author, it was not until the publication of his paper in 1839, that the generic name Lasiopus acquired any availability under the Règles. No description or definition was then given by Geoffroy for this genus, but, as in then publishing it for the first time, he expressly

stated that it was identical with his Ichneumia (of 1837) and that its type species was Herpestes albicaudus Cuvier, 1829, the name Lasiopus ranks, so far as Geoffroy is concerned, from 1839 and is an objective synonym of Ichneumia Geoffroy, 1837, each of the two nominal genera so named having the same nominal species as its type species. As so often happens when an author is so unwise as to give circulation to a manuscript name, another author published the name Lasiopus in the period between the time when Geoffroy used the name in his lecture (i.e. some time prior to 1835 or at latest early in that year) and the date of publication in 1839 of Geoffroy's lecture. The author concerned was Gervais who mentioned this name in a publication in which he gave an account of the lectures delivered by Geoffroy in Paris (Gervais, 1835, Resumé des Leçons de Mammalogie, Paris: 37). Gervais gave a few words by way of indication and placed in this nominal genus one species only, which is therefore the type species by monotypy. He did not cite this species under a binominal name, referring to it only as "l'animal du Cap nommé mangouste à pinceau blanc". This species was identified by Allen (1939, Bull. Mus. comp. Zool. 83:217) as Herpestes albicaudus Cuvier, 1829, but this view did not win universal acceptance, for Dr. W. H. H. Tate (American Museum of Natural History, New York), whom I consulted regarding this case, expressed the view (in litt. 16th March 1946) that Allen's determination of the "Mangouste à pinceau blanc" was erroneous and that the species referred to under this French vernacular name was not Herpestes albicaudus Cuvier but Herpestes penicillatus Cuvier, i.e. the species now subjectively identified with the type species of the genus Cynictis Ogilby, 1833 (see paragraph 22 of the present paper). Fortunately, it is not necessary to enter into the taxonomic question involved in determining the identity of the taxonomic species which is the type species of the nominal genus Lasiopus Gervais, 1835 (a matter on which it would be necessary to canvass the views of interested specialists), for the generic name Lasiopus Gervais, 1835, as also the name Lasiopus Geoffroy, 1839, is an invalid junior homonym of the earlier name Lasiopus Schoenherr, 1823 (Peric. Entom. (3): 35) (Class Insecta, Order Coleoptera). In view of the fact that these invalid names have had to be considered in a case submitted to the Commission, they should now be entered on the Official Index of Rejected and Invalid Generic Names in Zoology at the

same time that the generic name *Ichneumia* Geoffroy, 1837, is placed on the *Official List of Generic Names in Zoology*.

(32) "Icticyon" Lund, 1842

- 39. Three points arise in connection with the name *Icticyon* Lund, 1842. The first and second of these are of a purely nomenclatorial character, the third, in part, taxonomic also. The first two points are as follows:—
 - (a) The name *Icticyon* was published as a *nom. nov.* for *Cynogale* Lund, 1842, which is invalid by reason of being a junior homonym of *Cynogale* Gray (J.E.), [1837]. The type species of *Cynogale* Lund is, by monotypy, the species which later in the same year (1842) Lund named *Icticyon venaticus*. By the operation on the rejected name *Cynogale* Lund and on the substitute name *Icticyon* Lund of Rule (f) in Article 30, the foregoing species is automatically the type species also of *Icticyon* Lund.
 - (b) Under the regulations governing the Official Lists and Official Indexes the name Cynogale Lund, 1842, should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology at the same time that the name Icticyon Lund, 1842, is placed on the Official List of Generic Names in Zoology.
- 40. The third point is concerned with the taxonomic status of *Ictiycon* Lund. In the investigations undertaken in connection with the present application it was noted that in 1945 (i.e. long after the submission of Dr. Stiles' proposals) Simpson (*Bull. Amer. Mus. nat. Hist.* 85:110) had treated *Icticyon venaticus* Lund, 1842, the type species of *Icticyon* Lund, 1842, as being congeneric with the Fossil species *Speothos pacivorus* Lund, 1839, the type species of the genus *Speothos Lund*, 1839. In other words Simpson had sunk the name *Icticyon* Lund as a junior subjective synonym of *Speothos* Lund. This treatment

of the taxon *Icticyon* Lund led to consultations, the results of which are set out below:—

(a) Advice received from Commissioner H. Boschma, Rijksmuseum van Natuurlijke Historie, Leiden (letter dated 13th June 1947) :—

The answer to this question is already given by Simpson (1945:110) who regards *Icticyon* as a synonym of *Speothos*, but remarks in a footnote: "Many authors continue to use *Icticyon* for the living forms". As *Speothos* and *Icticyon* have different type species, no proof can be furnished that the two are synonyms or not. The safe procedure seems to me inclusion of both names in the *Official List*.

- (b) Advice received from Dr. W. H. H. Tate, American Museum of Natural History, New York (letter dated 13th June 1947):—
 - J. A. Allen (1914: 147) merely stated that Speothos and Icticyon must remain separate until pacivorus and venaticus were proved to be congeneric. Miller (1924: 155) ignored Speothos. I know of no actual report of comparison of pacivorus with venaticus. The assumption seems to have grown up during the years that Icticyon equals Speothos. Kraglievich (1930, Physis, Buenos Aires, 10) treated only Speothos. The two names may, however, represent separate subgenera which are yet congeneric. . . . My own guess is that Speothos will finally supercede Icticyon generically unless the latter is made a conserved name.
- (c) Advice received from Dr. Philip Hershkovitz, Chicago Natural History Museum (letter dated 3rd July 1947):—

The type species of *Icticyon* and *Speothos* have never been shown definitely to be conspecific (cf. J. A. Allen, 1914, *Proc. biol. Soc. Wash.* **27**: 147). Until recently, *Icticyon* was the more commonly used name. However, *Speothos* is now replacing it. This is the name, with *Icticyon* a synonym, used by Dr. Osgood in his unpublished check list of South American mammals.

(d) Advice received from Dr. Remington Kellogg, United States National Museum, Washington, D.C. (letter dated 9th July 1947):—

Speothos Lund, Blik. Bras. Dyrev., vol. 2, 1839, p. 33; vol. 3, 1840, p. 18 and vol. 5, 1843, was first revived for the Brazilian bush dog by Hermann von Ihering, 1911, Revista

Mus. Paulista, vol. 8, p. 219. The genus was based on fossil material. No one has as yet shown that the living representative is generically distinct from the fossil Speothos.

41. It appears from the advice received by specialists set forth in the preceding paragraph that the general tendency among mammalogists in recent years has been to treat the name Icticyon Lund, 1842, as a synonym of the name Speothos Lund, 1839, or at most to regard it as representing a taxon only subgenerically distinct from the genus Speothus Lund. On the other hand, it does not appear that a critical comparison has been made of the two genera and that no evidence, as conclusive as is possible in a subjective taxonomic matter of this kind, has been adduced to show that Icticyon Lund should be treated as a synonym of Speothos Lund. In these circumstances, and having regard to the important Public Health considerations advanced by Dr. Stiles when submitting the present application, it is desirable that the nomenclatorial status of Icticyon Lund should now be defined as closely as the taxonomic considerations involved permit. Accordingly, it appears that in accordance with the General Directive given to the Commission by the International Congress of Zoology for adoption in such cases, the best course will be to place the name Speothos Lund, 1839, on the Official List of Generic Names in Zoology, there being general agreement as to the status of this taxon, and at the same time that this is done, to place the name Icticyon Lund on the Official List with an endorsement that it is so placed for use by specialists who consider on taxonomic grounds that Icticyon Lund, 1842, is distinct from Speothos Lund, 1839.

(33) "Ictonyx" Kaup, 1835

42. The position of the name *Ictonyx* Kaup, 1835, is bound up with the problem of the status to be accorded to names published in Oken's *Lehrbuch der Naturgeschischte*, for the type species of this genus (*Viverra zorilla* Erxleben, 1777) is the type species also of the nominal genus *Zorilla* Oken, 1816, a name published in the foregoing work. It is accordingly proposed for the reasons already explained in connection with the

names Genetta Oken and Grison Oken (paragraph 30 above) that a decision should be deferred for the present on the question of the admission of the name Ictonyx Kaup to the Official List of Generic Names in Zoology.

(34) "Leucomitra" Howell, 1901

- 43. The only question which calls for consideration in connection with the name *Leucomitra* Howell is whether it represents a taxonomically valid unit. On this question a special investigation was undertaken when it was seen that in 1945 Simpson in his comprehensive survey of the group (*Bull. Amer. Mus. nat. Hist.* vol. 85) did not recognise the taxon *Leucomitra*. The consultation with specialists then initiated elicited the following advice:—
 - (a) Advice received from Commissioner H. Boschma, Rijksmuseum van Natuurlijke Historie, Leiden (letter dated 13th June 1947):—

Leucomitra Howell, 1901, is used by Miller (1923, Bull. U.S. nat. Mus. 128: 139) as the name of a subgenus of Mephitis Geoffroy & Cuvier. As the name has thus been used by one of the foremost mammalogists as recently as 1923, there must be some reason to regard Leucomitra as a separate subgenus.

(b) Advice received from Dr. G. H. H. Tate, American Museum of Natural History, New York (letter dated 13th June 1947):—

Miller (1924: 139) treats this as a subgenus of *Mephitis*. I have looked at *Mephitis macroura* and regard it as only specifically valid. *Leucomitra* is not in common use.

(c) Advice received from Dr. Philip Hershkovitz, Chicago Natural History Museum (letter dated 3rd July 1947):—

Leucomitra Howell, 1901: Name proposed as a subgenus of Chincha Lesson, 1842 (=Mephitis Geoffroy & Cuvier, 1795). Currently recognised, though little used, as a valid subgenus of Mephitis. Name is omitted by Simpson as he states (: 36, second column) that in his classification "it is impractical... to list groups smaller than genera".

(d) Advice received from Dr. Remington Kellogg, United States National Museum, Washington, D.C. (letter dated 9th July 1947):—

Leucomitra is currently recognised as a subgenus of Mephitis. The hooded skunks were accorded subgeneric rank by Howell on the basis of cranial and external characters.

44. In the light of the information set out in the preceding paragraph it is evident that the taxon represented by Leucomitra Howell, 1901, is regarded by some, but not by all, specialists as being identical with that represented by Mephitis Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795. In these circumstances the proper course in the present case will be to place the generic name Leucomitra Howell, 1901, on the Official List with an endorsement that it is so placed for use by those specialists who consider on taxonomic grounds that Leucomitra Howell is distinct from Mephitis Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795. Normally, it would be appropriate at the same time to place this latter name also on the Official List and it was indeed part of Dr. Stiles' application that this should be done. It will be seen, however, from paragraph 55 below that certain nomenclatorial difficulties which have been encountered make it desirable to postpone temporarily the addition of the name Mephitis to the Official List.

(35) "Lutra" Brisson, 1762

45. For the reasons already explained in connection with the name *Hyaena* Brisson, 1762 (paragraph 35 above) it is proposed that a decision on the question of the admission of the name *Lutra* Brisson, 1762, to the *Official List of Generic Names in Zoology* should be postponed for further consideration.

(36) "Lutreola" Wagner, 1841

46. The only point which calls for consideration in connection with the generic name *Lutreola* Wagner, 1841, is the taxonomic status of the unit so named. The investigation of this question

was prompted by the fact that in 1945 (i.e. long after the submission of Dr. Stiles' application) Simpson (Bull. Amer. Mus. nat. Hist. 85: 113) treated Lutreola Wagner as a junior synonym of Mustela Linnaeus, 1758; in other words, Simpson treated Viverra lutreola Linnaeus, 1758, the type species of Lutreola Wagner, as being congeneric with Mustela erminea Linnaeus, 1758, the species which was then, and still is now, though incorrectly, regarded as the type species of Mustela Linnaeus.* Simpson's treatment of Lutreola Wagner led to consultations, the results of which are set out below:—

(a) Advice received from Commissioner H. Boschma, Rijksmuseum van Natuurlijke Historie, Leiden (letter dated 13th June 1947) :—

Lutreola Wagner is regarded by recent authors as a subgenus of Mustela. (Cf, e.g., Brongersma & Junge (1942, Zool. Meded., Leiden 23:149). I do not agree with your statement that Simpson (1945) treats Lutreola as a synonym of Mustela. Simpson includes Lutreola in Mustela, but this may mean that he includes the subgenus Lutreola in the genus Mustela.

(b) Advice received from Dr. G. H. H. Tate, American Museum of Natural History, New York (letter dated 13th June 1947):—

Miller (1912, Cat. Mamm. West. Europe: 415; id., 1924, Bull. U.S. Nat. Mus. 128: 124) treats this as a subgenus of Mustela. The name is perhaps rather more commonly used than are many other subgeneric names but should never be employed generically.

(c) Advice received from Dr. Philip Hershkovitz, Chicago Natural History Museum (letter dated 3rd July 1947):—

Lutreola Wagner, 1841: All authors making use of subgeneric names recognise Lutreola as a subgenus of Mustela. Simpson indicates the status of Lutreola in the same way as that of Galerella, viz., as a subgenus.

(d) Advice received from Dr. Remington Kellogg, United States National Museum, Washington, D.C. (letter dated 9th July 1947):—

Lutreola Wagner, 1841: The American minks were revised by Hollister (1912, Proc. U.S. Nat. Mus. 44:471—480).

^{*} For a further note on Mustela Linnaeus, 1758, see paragraph 58 below.

Lutreola was considered to be a valid genus by S. I. Ognev (1931, The Mammals of Eastern Europe and Northern Asia 2:747, 749) and also by other Russian mammalogists. Characters of the baculum in part were the basis for its recognition as a genus. Currently recognised by American mammalogists as a subgenus of Mustela Linnaeus, 1758.

47. From the information set out above, it is clear that, while some specialists identify Lutreola Wagner with Mustela Linnaeus, others regard Wagner's Lutreola as representing a taxonomically valid genus or at least a taxonomically valid subgenus. In these circumstances the proper course in the present case will be to place the name Lutreola Wagner, 1841, on the Official List of Generic Names in Zoology with an endorsement that it is so placed for use by those specialists who consider on taxonomic grounds that Lutreola Wagner is distinct from Mustela Linnaeus, 1758.

(37) "Lutrogale" Gray (J.E.), 1865

48. The investigations undertaken in this case indicate that there is some doubt as to the identity of the type species of this genus. It is accordingly recommended that a decision on the question of the admission of the generic name *Lutrogale* Gray, 1865, to the *Official List of Generic Names in Zoology* should be deferred until the above question has been cleared up.

(38) "Lycaon" Brookes, 1827

49. The type species of this genus is Lycaon tricolor Brookes, 1827. This nominal species is subjectively identified by specialists with the nominal species Hyaena picta Temminck, 1820. In consequence, the name tricolor Brookes, 1827, is currently treated as a junior subjective synonym of picta Temminck, 1820. In these circumstances the name picta Temminck and not the name tricolor Brookes should be placed on the Official List of Specific Names in Zoology at the time when the generic name Lycaon Brookes is placed on the Official List of Generic Names in Zoology.

(39) "Marputius" Gray (J.E.), 1837

50. Two questions call for examination in connection with the name *Marputius* Gray, 1837. The first, which is purely nomenclatorial, is concerned with the original reference for the name of the type species of this taxon, the second, with the taxonomic status of the taxon to which Gray gave this name. The investigations undertaken in this case have resolved the difficulties in regard to the first of these points. The second point requires further examination before the name *Marputius* Gray can appropriately be placed on the *Official List*. It is accordingly recommended that a decision on the foregoing question be deferred for the purpose of permitting a further study of the issues involved.

(40) "Martes" Pinel, 1792

51. Two difficulties arise in connection with the name Martes Pinel, 1792. First, there is not agreement as to the species which under the Règles should be regarded as being the type species of this genus. Second, the nominal species Mustela martes Linnaeus, 1758, which is commonly accepted as being the type species of this genus appears also to be the type species of Mustela Linnaeus, 1758, although it is not currently accepted as such.* In these circumstances it is recommended that a decision on the proposal to place the name Martes Pinel, 1792, on the Official List should be deferred until it is possible for the Commission to consider in detail the issues involved in this case.

(41) "Meles" Brisson, 1762

52. As in the case of the name *Hyaena* Brisson, 1762 (paragraph 35 above), it is recommended that a decision on the admission of the name *Meles* Brisson, 1762, to the *Official List* should be deferred until a decision has been reached on the question of the availability of the work (the Second Edition of the *Regnum animale*) in which that name was published.

^{*} For a further note on Mustela Linnaeus, 1758, see paragraph 58 below.

(42) "Mellivora" Storr, 1780

53. This name was used by Storr in the text of his book only in the nominative plural. As such, it did not acquire the status of availability. It is possible, however, that it was published in the nominative singular on the tables at the end of Storr's book. These tables are often lacking in copies of this author's *Prodromus*, and I have so far been unable to consult a copy containing them. Accordingly, I recommend that a decision on the question of the admission of the name *Mellivora* Storr, 1780, to the *Official List* should be deferred until it has been found possible to examine Storr's tables.¹⁴

(43) "Melursus" Mayer, 1793

54. The type species of this genus is *Melursus lybius* Meyer, 1793. This nominal species is subjectively identified by specialists with *Bradypus ursinus* Shaw, 1791. In consequence, the name *lybius* Meyer is treated as a junior subjective synonym of *ursinus* Shaw, 1791. In these circumstances the name *ursinus* Shaw and not the name *lybius* Meyer should be placed on the *Official List of Specific Names in Zoology* at the time when the name *Melursus* Meyer, 1793, is placed on the *Official List of Generic Names in Zoology*.

(44) "Mephitis" Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795

55. A difficulty arises in the present case from the fact that the species which is the type species of this genus is currently known by a specific name (*mephitis*) which is attributed to Schreber but which was in fact never published as a new name by that author, who merely misapplied to the species concerned this misspelled version of the specific name *memphitis* Linnaeus,

¹⁴ The further investigation in regard to the name Mellivora Storr has since been undertaken in the Second Report by the Secretary on Dr. C. W. Stiles' Application Z.N.(S.) 97 and as a result this generic name has now been placed on the Official List of Generic Names in Zoology. The Report referred to above has been reproduced in paragraph 15 of Opinion 384 (p. 105 of the present volume).

1758, as published in the combination *Viverra memphitis*. Accordingly, it will be necessary for the Commission to use its Plenary Powers if the name *mephitis* is to be retained for the Chinche. It is recommended that a decision on the application to place the generic name *Mephitis* Geoffroy Saint-Hilaire & Cuvier, 1795, on the *Official List* be deferred until the whole of the relevant facts in this case can be laid before the Commission.

(45) "Micraonyx" Allen, 1919

56. The type species of this genus, Lutra leptonyx Horsfield, 1823, is currently identified with Lutra cinerea Illiget, [1815]. Another nominal species which is also so identified is Amblonyx concolor Rafinesque, 1832, the type species of Amblonyx Rafinesque, 1832. Thus, the nominal genera Micraonyx Allen, 1919, and Amblonyx Rafinesque, 1832, are subjectively identified with one another by specialists who accordingly treat Micraonyx Allen as a junior subjective synonym of Amblonyx Rafinesque. Both these generic names were recommended by Dr. Stiles for admission to the Official List. In view of the facts set out above, it is proposed that the application in regard to the name Amblonyx Rafinesque be granted but that that in regard to Micraonyx Allen be rejected.

(46) "Mungos" Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795

57. The only point calling for note in this case is that in 1819 Muirhead emended the generic name *Mungos* to *Mungo*. This emendation was not justified under the *Règles*, and it is accordingly recommended that the Invalid Emendation *Mungo* Muirhead, [1819], be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* at the same time that the Valid Original Spelling *Mungos* Geoffroy Saint-Hilaire & Cuvier, 1795, is placed on the *Official List of Generic Names in Zoology*.

(47) "Mustela" Linnaeus, 1758

58. Thomas (1911) selected Mustela erminea Linnaeus, 1758, to be the type species of this genus and it was this species which in the present application Dr. Stiles recommended should be accepted as the type species of Mustela. This appears to be the species currently accepted as the type species of this genus. Thomas's action was, however, anticipated in 1901 by Miller & Rehn and again in 1904 by Palmer, who both selected Mustela martes Linnaeus, 1758, to be the type species of Mustela Linnaeus. Since that species is currently accepted as the type species of Martes Pinel, 1792, the effect of the action by Miller & Rehn, unless suppressed by the Commission under its Plenary Powers, would be (a) to deprive the genus now known as Mustela Linnaeus of its customary name and (b) to transfer the name Mustela to the genus currently known as Martes Pinel. In these circumstances, it is recommended that, as in the case of the name Martes Pinel (paragraph 51 above), no decision should be taken on the proposal for the admission of the name Mustela Linnaeus to the Official List until the Commission has had an opportunity to examine the problem outlined above.

- (48) "Mydaus" Cuvier (G.F.), 1821 and (49) "Nandinia" Gray (J.E.), 1843
- 59. No difficulties arise in connection with either of these names.

(50) "Nasua" Storr, 1780

60. The name *Nasua* Storr, 1780, has already been placed on the *Official List* by the Ruling given by the Commission in *Opinion* 91. Accordingly, no action is called for in this case.

(51) "Oryctogale" Merriam, 1902

61. The only question which calls for consideration in connection with the generic name *Oryctogale* Merriam, 1902, is the

taxonomic status of the unit so named. The investigation of this problem was undertaken when it was noted that Simpson (1945, Bull. Amer. Mus. nat. Hist. vol. 85) did not recognise Oryctogale Merriam as a valid genus. The following are the results of the consultations then undertaken:—

(a) Advice received from Commissioner H. Boschma, Rijksmuseum van Natuurlijke Historie, Leiden (letter dated 13th June 1947):—

Oryctogale Merriam is treated as a subgenus of Conepatus Gray by Miller (1923, Bull. U.S. nat. Mus. 128: 140). Similar case as that of Leucomitra.*

(b) Advice received from Dr. G. H. H. Tate, American Museum of Natural History, New York (letter dated 13th June 1947):—

Orcyctogale Merriam, 1902. Simpson omits. Miller (1924:140) treats as a subgenus of Conepatus. I have looked at Conepatus leuconota and regard it as only specifically distinct. Orcytogale is not in common use.

(c) Advice received from Dr. Philip Hershkowitz, Chicago Natural History Museum (letter dated 3rd July 1947):—

Proposed as a subgenus of *Conepatus* and currently recognised as such. As noted before, Simpson omits names originally proposed, or generally recognised, as subgenera.

(d) Advice received from Dr. Remington Kellogg, United States National Museum, Washington, D.C. (letter dated 9th July 1947):—

The hog-nosed skunks of Southern United States, Mexico, and Central America, are currently placed in the subgenus Oryctogale. The subgenus Oryctogale Merriam was based on external and cranial characters. No revision of the South and North American Conepatus has been prepared in recent years. Consequently no opinion is offered regarding the subgenus Oryctogale. Oryctogale is regarded as a subgenus of Conepatus at the present time.

62. In the light of the information set out in the preceding paragraph, it appears that the appropriate course to adopt in this case will be for the Commission to place the name *Oryctogale*

^{*} See paragraph 43(a) of the present Report.

Merriam, 1902, on the *Official List* with an endorsement that it is so placed for use by specialists who consider on taxonomic grounds that *Oryctogale* Merriam is distinct from *Conepatus* Gray (J.E.), 1837. It will be recalled (paragraph 16 above) that it is also now recommended that the name *Conepatus* Gray should be placed on the *Official List*.

(52) "Otocyon" Müller (J.), 1836

- 63. Two questions arise in connection with this name. The first, which is purely nomenclatorial, is concerned with the circumstances in which the name of this genus and of its type species were published. The second is concerned with the taxonomic status of the nominal species which is its type species. These questions are examined in turn below.
- 64. The name Otocyon was published in a paper by Johannes Müller in the Jahresbericht der Fortschrifte anatom.-physiol. Wissensch. im Jahre 1835. This Jahresbericht was not published as a separate unit but was published in the Archiv f. Anat. Physiol. u. Wissensch. Medicin Jahre 1836. It is therefore in this latter serial that the name Otocyon must be treated as having been first published. This Archiv was published without a serial volume number and it is necessary therefore to refer to it by the number of the year to which it relates. Two sets of numerals were used for numbering the pages of this volume, arabic numerals being used for the portion containing original articles, while Roman numerals were used for the portion devoted to the Jahresbericht. The name Otocyon was published on page 1.
- 65. In order to understand properly the circumstances in which the genus *Otocyon* Müller was first established, it is necessary to examine the exact manner in which that name and also the name of its type species were first published. The following is a free translation of the passage in question:—

I will not let this opportunity pass without mentioning that the Königliche Museum possesses the hitherto unknown skull of Canis

megalotis lalandii. The dentition of this remarkable animal was previously unknown and its classification with Canis therefore doubtful. It does not belong there. It forms a separate genus, whereas Canis cerda really is a dog. [Here follows a description of the dentition and the skull.] The generic name, according to the Zoological Museum, is Otocyon (caffer). For further information I must refer to an expected publication by Herr Lichtenstein. Proteles lalandii, according to our three skulls, has above, 3, below, 2 false molars. . . Otocyon and Proteles form evidently each a separate genus of the Digitigrades.

- 66. It is evident from the foregoing passage that Müller obtained both the generic name *Otocyon* and the specific name *caffer* from the Königliche Museum and that both of these were manuscript names proposed by Lichtenstein but at that time unpublished. (Under a decision by the Thirteenth International Congress of Zoology, Paris, 1948, manuscript names published in this way are attributable to the author by whom they were published and not to the author by whom they were proposed in manuscript (1950, *Bull. zool. Nomencl.* 4:259—260). The names here under discussion are accordingly attributable to Müller and not to Lichtenstein.) The genus *Otocyon* was clearly monotypical from Müller's standpoint, and, even if this had not been so, the genus *Otocyon* would still have been monotypical from the nomenclatorial point of view because Müller cited only one included species (1950, *Bull. zool. Nomencl.* 4:153).
- 67. The type species of the genus Otocyon Müller, 1836, is Otocyon caffer Müller, 1836, by monotypy. This nominal species is subjectively identified by specialists with Canis megalotis Desmarest, 1822. In consequence, the name caffer Müller is treated as a junior subjective synonym of megalotis Desmarest, 1822. In these circumstances, the name megalotis Desmarest, and not the name caffer Müller should be placed on the Official List of Specific Names in Zoology at the time when the generic name Otocyon Müller, 1836, is placed on the Official List of Generic Names in Zoology.

(53) "Paracynictis" Pocock, 1916

68. The only question which calls for consideration in connection with the generic name *Paracynictis* Pocock, 1916, is the

taxonomic status of the unit so named. The investigation of this question was undertaken when it was noted that Simpson (1945, Bull. Amer. Mus. Nat. Hist. 85:117) had treated the name Paracynictis Pocock as a junior subjective synonym of Cynictis Ogilby, 1833. The following are the results of the consultations then undertaken:—

(a) Advice received from Commissioner H. Boschma, Rijksmuseum van Natuurlijke Historie, Leiden (letter dated 13th June 1947):—

Paracynictis Pocock is treated as a distinct genus by Allen (1939, Bull. Mus. comp. Zool. 83: 226). Simpson (1945: 117) includes it in Cynictis Ogilby. Similar case as that of Galerella.*

(b) Advice received from Dr. G. H. H. Tate, American Museum of Natural History, New York (letter dated 13th June 1947):—

Paracynictis Pocock, 1916: Recognised as full monotypic genus by Allen (1919: 226). I have talked with Dr. J. E. Hill personally on the status of this group. He feels (Hill and Carter, 1941: 131) that the difference in the digital formula is adequate for the maintenance of full generic separation.

(c) Advice received from Dr. Philip Hershkowitz, Chicago Natural History Museum (letter dated 3rd July 1947):—

Paracynictis Pocock, 1916 and Cynictis Ogilby, 1833. Both genera are recognised by G. M. Allen and by Hill and Carter. Simpson indicates the status of Paracynictis as a subgenus of Cynictis.

(d) Advice received from Dr. Remington Kellogg, United States National Museum, Washington, D.C. (letter dated 9th July 1947):—

Paracynictis Pocock, 1916, Type, Cynictis selousi de Winton. This genus was based on the suppression of digit 1 of the forefoot. This genus is not listed by Wm. K. Gregory, 1939, Proc. Amer. Philos. Soc., vol. 81, no. 3, August 31, 1939, p. 372. Conservative mammalogists will probably consider Paracynictis to be a synonym of Cynictis. Those that attach weight to the reduction of the number of digits will recognise Paracynictis as a genus

^{*} For Dr. Boschma's comment on the name Galerella Gray (J.E.), [1865], see paragraph 28 above [i.e. in the present Appendix].

69. From the information set out above it is clear that, while some specialists identify *Paracynictis* with *Cynictis*, others regard it as a valid genus or at least as a valid subgenus of *Cynictis*. In these circumstances the proper course in the present case will be to place the name *Paracynictis* Pocock, 1916, on the *Official List* with an endorsement that it is so placed for use by those specialists who consider on taxonomic grounds that *Paracynictis* Pocock is distinct from *Cynictis* Ogilby, 1833.

(54) "Paradoxurus" Cuvier (G.F.), 1821

70. The type species of this genus is *Paradoxurus typus* Cuvier (G.F.), 1821. This nominal species is subjectively identified by specialists both at the species-level and at the subspecies-level with the nominal species *Viverra hermaphroditus* Pallas, [1777]. In consequence, the name *typus* Cuvier, 1821, is currently treated as a junior subjective synonym of *hermaphroditus* Pallas, [1777]. In these circumstances the name *hermaphroditus* Pallas and not the name *typus* Cuvier should be placed on the *Official List of Specific Names in Zoology* at the time when the generic name *Paradoxurus* Cuvier is placed on the *Official List of Generic Names in Zoology*.

(55) "Poecilogale" Thomas (M.R.O.), 1885

71. No difficulties arise in connection with this name.

(56) "Poiana" Gray (J.E.), [1865]

72. Gray did not designate a type species for this nominal genus, but he placed in it only the nominal species *Genetta richardsonii* Thomson (T.R.H.), 1842, which is therefore the type species by monotypy. The application submitted to the Commission in regard to this case stated as regards the type species of this genus: "mt. *richardsoni* Gerrard so. (tsd. 1904) *poensis* Waterhouse, from Gernando Po". This suggested synonymy had many years earlier been discussed and rejected by Pocock ([1908], *Proc. zool. Soc. Lond.* 1907 (Pt. 2): 1039). It was considered again in connection with the present application by

Commissioner Angel Cabrera who furnished the following note (in litt., 25th September 1931): "The name poensis Waterh. has nothing to do with this. Genetta poensis Waterh. is a true Genetta, and not a synonym of Poiana richardsoni (Thomson), as wrongly stated by Palmer". The name Genetta poensis Waterhouse, 1838 (Proc. zool. Soc. Lond. 6(65): 59) is considerably older than Genetta richardsonii Thomson, 1842, and accordingly, if specialists had agreed that each of these two nominal species represented the same taxonomic species, the specific name poensis Waterhouse, 1838, as published in the combination Genetta poensis, would, from the subjective taxonomic point of view, have been the oldest available specific name applicable to the taxonomic species concerned. In view, however, of the fact that, as it now appears, specialists no longer treat these two nominal species as representing the same taxonomic species, the question calls for no further comment here.

(57) "Potos" Geoffroy Saint-Hilaire (E.) & Cuvier (G.F.), 1795

73. There are several Original Spellings for the name of the type species of this genus, and it is not clear at present which of these spellings should, under the *Règles*, be accepted as the Valid Original Spelling. It is accordingly proposed that a decision on the question of the admission of the foregoing generic name to the *Official List* be deferred until the above matter has been cleared up.

(58) "Procyon" Storr, 1780

74. The name *Procyon* Storr, 1780, has already been placed on the *Official List* by the Ruling given by the Commission in *Opinion* 91. Accordingly, no action is called for in this case.

(59) "Proteles" Geoffroy Saint-Hilaire (I.), 1824

75. Two points call for comment in the present case. The first is concerned with a purely nomenclatorial question, the

second, with the taxonomic status of the type species of this genus. These points are as follows:—

- (a) The name *Proteles* was published as a new name in two papers by Geoffroy, each of which was published in 1824. The earlier of these papers is that which appeared in the *Bull. Sci. Soc. philomat. Paris* in its issue of September 1824.
- (b) The type species of this genus is *Proteles lalandii* Geoffroy Saint-Hilaire, 1824. This nominal species is subjectively identified by specialists with the nominal species *Viverra cristata* Sparrman, 1783. In consequence, the name *lalandii* Geoffroy Saint-Hilaire is currently treated as a junior subjective synonym of *cristata* Sparrman, 1783. In these circumstances, the name *cristata* Sparrman, 1783, and not the name *lalandii* Geoffroy should be placed on the *Official List of Specific Names in Zoology* at the time when the generic name *Proteles* Geoffroy is placed on the *Official List of Generic Names in Zoology*.

(60) "Pteronura" Gray (J.E.), 1837

76. The type species of this genus is *Pteronura sambachii* Gray (J.E.), 1837, by monotypy. In the application now under consideration Dr. Stiles treated the specific name *sambachii* Gray, 1837, as a junior synonym of "brasiliensis Zimm., 1780". The work here referred to is Zimmermann's Geographische Geschichte. At the time of the above submission the availability of the foregoing work was open to question, but, as has been explained in the note on Fennecus Desmarest, the Commission has now ruled in favour of the acceptance of this work. Reference to the Geographische Geschichte showed that Zimmermann had never published a specific name consisting of the word brasiliensis. In the passage concerned Zimmermann had discussed an animal under the vernacular name "Der Guachi" and in the list of references which he gave for earlier works in which this species was mentioned he cited the name brasiliensis which he

attributed to "Brisson, R.p. 278", i.e. to the *Regnum animale* of that author. This latter work at the species-name level is predominantly non-binominal and certainly does not comply with the requirements of Proviso (b) to Article 25. In these circumstances the name *brasiliensis* Brisson, 1762 (: 202, 250, 267) possesses no status in nomenclature. The name *sambachii* Gray, being the oldest validly published name available, is thus the valid name for the type species of the genus.

(61) "Putorius" Cuvier (G.L.C.F.D.), 1817

77. The name *Putorius* Cuvier, 1817, has already been placed on the *Official List* by the Ruling given by the Commission in *Opinion* 91. Accordingly, no action is called for in this case.

(62) "Rhynchogale" Thomas (M.R.O.), 1894

78. The name Rhynchogale Thomas, 1894, is a nom. nov. for the name Rhinogale Gray (J.E.), [1865], which is invalid by reason of being a junior homonym of Rhinogale Gloger, 1841. The name Rhinogale Gray, [1865], should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology at the same time that the generic name Rhynchogale Thomas, 1894, is placed on the Official List of Generic Names in Zoology.

(63) "Spilogale" Gray (J.E.), 1865

79. No difficulties arise in connection with this name.

(64) "Suricata" Desmarest, 1804

80. The type species of this genus is Suricata capensis Desmarest, 1804. This nominal species is subjectively identified by specialists with the nominal species Viverra suricata Schreber, [1776]. In consequence, the name capensis Desmarest is currently treated as a junior subjective synonym of suricata

Schreber. In these circumstances the name *suricata* Schreber, [1776], and not the name *capensis* Desmarest, 1804, should be placed on the *Official List of Specific Names in Zoology* at the time when the generic name *Suricata* Desmarest, 1804, is placed on the *Official List of Generic Names in Zoology*.

(65) "Taxidea" Waterhouse (G.R.), 1839

- 81. Two points call for note in connection with this generic name. These points are:—
 - (a) In 1847 this generic name was emended by Hodgson to *Taxidia*. This emendation is invalid and it should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* at the same time that this generic name in its valid original spelling *Taxidea* is placed on the *Official List of Generic Names in Zoology*.
 - (b) The type species of this genus is *Ursus labradorius* Gmelin, 1788. This nominal species is subjectively identified by specialists with the nominal species *Ursus taxus* Schreber, [1777]. In consequence, the name *labradorius* Gmelin, 1788, is currently treated as a junior subjective synonym of *taxus* Schreber, [1777]. In these circumstances, the name *taxus* Schreber and not the name *labradorius* Gmelin should be placed on the *Official List of Specific Names in Zoology* at the time when the generic name *Taxidea* Waterhouse, 1839, is placed on the *Official List of Generic Names in Zoology*.

(66) "Tayra" Oken, 1816

82. As in the case of the names *Genetta* Oken, 1816, and *Grison* Oken, 1816 (paragraph 30 above), it is recommended that a decision on the question on the admission of the name *Tayra* Oken, 1816, to the *Official List* should be deferred until a decision has been reached on the question of the availability of

Oken's *Lehrbuch*, the work in which this generic name was published.¹⁵

(67) "Thalarctos" Gray (J.E.), 1825

- 83. Three points call for note in connection with this name. The first and third of these points are purely nomenclatorial, the second, in part also taxonomic. The points in question are the following:—
 - (a) Agassiz in 1846 emended this generic name to *Thalarctus*, but under the *Règles* this is an Invalid Emendation and is to be rejected. Accordingly when this generic name in its valid original spelling *Thalarctos* Gray is placed on the *Official List of Generic Names in Zoology*, the Invalid Emendation *Thalarctus* Agassiz should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*.
 - (b) The type species of this genus is the nominal species Ursus polaris Gray (J.E.), 1825. This nominal species has, however, long been identified with the nominal species Ursus maritimus attributed either (i) to Phipps, 1774 (Voy. toward N. Pole: 185) or (ii) to Erxleben, 1777 (Syst. Regn. Anim.: 160). Another early use of the specific name Ursus maritimus is that by Schreber, [1776], (Die Säugthiere 3: pl. 141; id., [1777], ibid. 3:513). None of these authors was, however, the first to apply the name Ursus maritimus to the Polar Bear, the first author to have done so being (as pointed out by Commissioner Angel Cabrera, in litt., 25th September 1931) Linnaeus himself in 1758 in a note attached to the description of the Brown Bear, Ursus arctos Linnaeus, 1758 (Syst. Nat. (ed. 10) 1: 47).

¹⁵ Since this passage was written the International Commission has rejected Oken's *Lehrbuch* for nomenclatorial purposes. This decision has been embodied in *Opinion* 417 (now in the press). The question remaining to be considered is whether the generic name *Tayra* Oken, 1816, should be validated by the Commission under its Plenary Powers.

(c) In view of the fact that, as explained in (b) above, the name polaris Gray, 1825, is treated by specialists as being a junior subjective synonym of the specific name maritimus attributed to one or other of the earlier authors discussed above, the name maritimus, as published in the combination Ursus maritimus in 1758 by Linnaeus, the author by whom this name was first published in the above combination for the Polar Bear, and not the later name polaris Gray, 1825, should be placed on the Official List of Specific Names in Zoology at the time when the generic name Thalarctos Gray is placed on the Official List of Generic Names in Zoology.

(68) "Urocyon" Baird, 1857

- 84. Two points arise for consideration in the present case. The first of these is concerned with the determination of which of two papers by different authors published in the same year was the first in which a type selection for the genus *Urocyon* Baird was validly made under Rule (g) in Article 30. The second is concerned with the taxonomic status of the nominal species which is the type species of this genus. These questions are discussed in paragraphs 85—88 and 89 below respectively.
- 85. Baird introduced the name Urocyon as the name for a subgenus of the genus Vulpes; he placed in this subgenus two nominal species, of which the first was Canis virginianus Schreber, [1776]. Baird did not designate a type species for this genus and no type species was selected by any subsequent author until the year In that year, however, Canis virginianus Schreber was independently selected as the type species (1) by Miller & Rehn, 1901, Proc. Boston Soc. nat. Hist. 30: 202-204. and (2) by Elliot, 1901, Field Mus. Publ. (Zool.) 2:307. When I ascertained that there were these two competing type selections for the genus Urocyon, each published in an American serial published in the same year (1901), I appealed for information to Dr. Remington Kellogg (at that time Curator, Division of Mammals, and now Director, United States National Museum, Washington, D.C.) and to the late Dr. Wilfred H. Osgood (Chicago Natural History Museum). At the same time I wrote to Mrs. Leila F. Clark

(Librarian, Smithsonian Institution, Washington, D.C.), thinking that records of the date of receipt by the Smithsonian Institution of the relevant parts of the two serials concerned might throw some light on the question at issue.

86. Dr. Remington Kellogg replied (in a letter dated 12th March 1946) that the type species of the genus *Urocyon* Baird was the nominal species *Canis virginianus* Schreber, [1776] (which, he added, represented the same taxonomic species as *Canis cinereoargenteus* Schreber, [1776]); that the paper in which Elliot had selected that species was published on "March 6 1901"; and that Miller & Rehn's paper was published on "December 27 1901, at 10.55 a.m., when it was available for public consultation at the library of the Boston Society of Natural History". On the same day (12th March 1946), Mrs. Leila F. Clark replied that the library stamps on the copies of scientific serials in the library of the Smithsonian Institution threw no light on the problem. At the same time, she added the following information in supplement to that contained in Dr. Remington Kellogg's letter of 12th March 1946):—

Dr. Remington Kellogg tells me that the dates of publication of the two journals are on record in his Division. According to a letter dated January 1, 1902, written by the late Dr. Glover Allen who was, at that time, Secretary of the Boston Society of Natural History, the Part of volume 30 of its *Proceedings* containing the paper by Miller & Rehn was available to the public on December 27, 1901, at 10.55 a.m., while a memorandum from the Field Museum, undated, but presumably written at about the same time, gives the date of publication of the Part of Volume 2 of the Zoology section of the Field Museum Publications containing page 307, as March 6, 1901 ".

87. The foregoing information was further supplemented as follows by the late Dr. Wilfred H. Osgood (in a letter dated 17th July 1946):—

According to records in the mailing office of the Chicago Natural History Museum (Field Museum), 100 copies of Publication 45 were received from the printer on February 28, 1901, and 900 copies on March 5. Of these at least a few were distributed on March 20 and March 30. Therefore the date of publication may safely be taken as not later than March 1901, which is considerably earlier than the December 1901 of Miller & Rehn. Designation of the type species by Elliot stands.

- 88. The information (summarised in the two preceding paragraphs) kindly furnished by the specialists consulted establishes beyond possibility of question that Elliot's paper was published before that by Miller & Rehn and therefore that under the Règles the effective selection of a type species for the genus Urocyon Baird is that made by Elliott.
- 89. The nominal species Canis virginianus Schreber, [1776], which is the type species of the genus Urocyon Baird, is currently identified by specialists with the nominal species Canis cinereoargenteus Schreber, [1776], and the species concerned is known by the latter name, the name virginianus Schreber being treated as a junior subjective synonym. In these circumstances, the name cinereoargenteus Schreber and not the name virginianus Schreber should be placed on the Official List of Specific Names in Zoology at the time when the generic name Urocyon Baird is placed on the Official List of Generic Names in Zoology.

(69) "Ursus" Linnaeus, 1758

90. The name *Ursus* Linnaeus, 1758, has already been placed on the *Official List of Generic Names in Zoology* by the Ruling given by the Commission in *Opinion* 75. Accordingly, no action is called for in this case.

(70) "Viverra" Linnaeus, 1758

91. No difficulties arise in connection with this name.

(71) "Viverricula" Hodgson, 1838

92. Hodgson cited only two nominal species as being included in this nominal genus, these species being cited in the unsatisfactory fashion "indica et rape auct". The species so included are: (1) Viverra indica (Geoffroy MS.) Desmarest, 1804 (Nouv. Dict. Hist. nat. 24 (Tab.): 17); and (2) the species Viverra rasse Horsfield, 1823 (Zool. Researches Java: (6)). Neither of these species was designated by Hodgson as the type species of this nominal genus.

- 93. So far as I have been able to ascertain, the first author to select either of the originally included species to be the type species of Viverricula Hodgson was Sclater (W.L.), 1891 (Cat. Mamm. Ind. Mus. 2: 238), who, after identifying Viverra indica Desmarest, 1804, with Viverra malaccensis Gmelin, 1788 (in Linnaeus, Syst. Nat. (ed. 13) 1:92), selected the last named nominal species to be the type species of Viverricula Hodgson. This method of selecting the type species of a nominal genus is open to strong objection, owing to the confusion so implied between subjective taxonomic ideas (regarding the taxonomic identity of two nominal species) and objective nomenclatorial facts (regarding the nominal species actually included in a nominal genus by its original author). Indeed, up to the time of the Meeting of the Commission and the Congress in Paris, 1948, it was doubtful whether such type selections complied with the rigorous requirements of Rule (g) in Article 30 of the Règles. In view of the large number of accepted type selections which rest upon this insecure foundation and of the need therefore for a clear pronouncement as to their acceptability under Article 30, the Commission at Paris agreed to recommend (and the Thirteenth Congress approved) that words should be inserted in the Règles prescribing that, where an author selects as the type species of a genus a nominal species which was not an originally included species and at the same time synonymises that nominal species with a nominal species which was an originally included species, the type selection so made is to be accepted as complying with the requirements of Article 30, Rule (g) (1950, Bull. zool. Nomencl. 4: 180, Point 69(3)(b)). Thus, Sclater's action in 1891 is now seen to have constituted a valid selection of Viverra indica Desmarest as the type species of Viverricula Hodgson. (In this particular case, no harm would have arisen even if the Commission had given a ruling in the opposite sense, for the next following selection of a type species was by Pocock in 1939 (Faun. Brit. Ind. (Mamm.) (ed. 2) 1:362, where Viverra indica Desmarest, 1804, was unequivocally selected as the type species of Viverricula Hodgson.)
- **94.** In the application submitted to the Commission in this case, the type species of the nominal genus *Viverricula* Hodgson was given as "? tsd. (date?) *malaccensis* syn. *indica*". We have now seen (1) that the nominal species *Viverra malaccensis* Gmelin, 1788, was not one of the nominal species originally included by

Hodgson in the nominal genus Viverricula Hodgson; (2) that the nominal species Viverra indica Desmarest, 1804, on the other hand was such a species and (3) that that nominal species was validly selected as the type species of Viverricula by Sclater in 1891. The only point arising out of this part of the application submitted to the Commission which remains to be considered is the subjective identification by the late Commissioner Stiles (following Sclater (1891) and Palmer (1904, Fauna N. Amer 25:707)) of the nominal species Viverra indica Desmarest and Viverra malaccensis Gmelin with one another. On this subject Honorary Life President (then President) Karl Jordan submitted under cover of a letter dated 6th December 1934 the following note which had been communicated to him by the late Dr. R. I. Pocock: "Viverricula: the genotype is indica; malaccensis must go. It was named by Gmelin from Sonnerat's description and figure. The description was written apparently from memory of probably two, if not more, oriental species, fitting none, and the figure taken from a Cape Genet living in Paris". In 1933 Pocock (J. Bombay nat. Hist. Soc. 36: 629-631) rejected the name malaccensis Gmelin for this species. In 1935, however, Chasen (J. Siam Soc. nat. Hist., Suppl. 10:41) thought that the name malaccensis should be retained. Quite recently, this subject has been reviewed by Ellerman & Morrison-Scott (1951, Checklist pal. ind. Mamm.: 282), who have accepted the name indica Desmarest as the oldest available name for this species. There appears therefore to be no reason why the specific name indica Desmarest, 1804, as published in the combination Viverra indica, the oldest specific name objectively available for the type species of the genus Viverricula Hodgson and the name used by Hodgson when establishing that nominal genus, should not be placed on the Official List of Specific Names in Zoology. It is accordingly recommended that this action should be taken at the time when the generic name Viverricula Hodgson is placed on the Official List of Generic Names in Zoology.

(72) "Vormela" Blasius, 1884

95. The type species of this genus is *Mustela sarmatica* Pallas, 1771, a nominal species which is subjectively identified by

specialists with the nominal species Mustela peregusna Gueldenstaedt, 1770. In consequence the name sarmatica Pallas is treated as a junior subjective synonym of peregusna Gueldenstaedt. In these circumstances, the name peregusna Gueldenstaedt and not the name sarmatica Pallas should be placed on the Official List of Specific Names in Zoology at the time when the generic name Vormela Blasius is placed on the Official List of Generic Names in Zoology.

(73) "Vulpes" Oken, 1816

96. As in the case of the other generic names introduced by Oken discussed in the present Report (Genetta; Grison; Tayra), it is recommended that no decision regarding the admission of the generic name Vulpes Oken to the Official List be taken until the Commission has taken a decision on the question of the nomenclatorial availability of the Lehrbuch der Naturgeschichte, the work in which this name was published 16. The present case is complicated also by the existence of earlier works containing the name Vulpes, which will also need to be considered by the Commission before a decision can be taken in the present case.

(74) "Xenogale" Allen, 1919

97. No difficulties arise in connection with this name.

Since this passage was written the International Commission has rejected Oken's Lehrbuch for nomenclatorial purposes. This decision has been embodied in Opinion 417 (now in the press). The question remaining to be considered is whether the generic name Vulpes Oken, 1816, should be validated by the Commission under its Plenary Powers.